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AUTHOR Ho, Rose
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ABSTRACT

The primary objective of this action research was to shift the teaching method used by preschool teachers in Hong Kong from a teacher-directed mode by training them to use the project approach. The secondary objective was to measure children's achievement while using the project approach, focusing on their language ability, social development, and self-initiated learning. Teacher supervisors received training on the project approach, including training in brainstorming, questioning techniques, drama and learning, and emergent curriculum. Participating in the action research were 12 children from 3 experimental centers. Data were collected by videotaping classroom activities and reviewing teachers' journals, children's portfolios, and project books. Findings suggest that children became more capable in language comprehension and expression as they carried out their own project work. By the end of the classroom project, 87 percent of the class showed interest in the project and 35 percent were able to generate solutions to problems. Over half the children were able to cooperate with classmates at the end of the project, and 86 percent were eager to participate in group activities. Examination of the project books showed that teachers were moving from a teacher-directed mode to a more children-directed paradigm. Teachers' journals noted that teachers became more aware of giving children ample opportunities to explore and to learn from their own mistakes. (Contains 18 references.) (KB)

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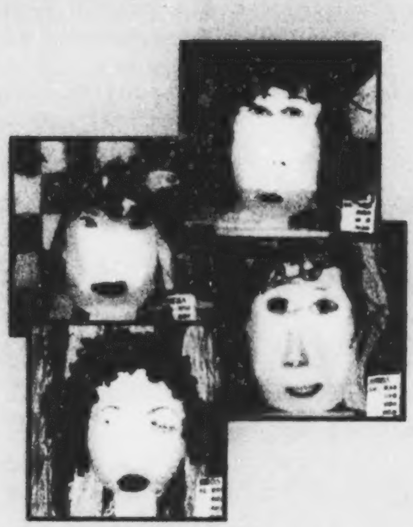

Implementing
PROJECT APPROACH IN HONG KONG

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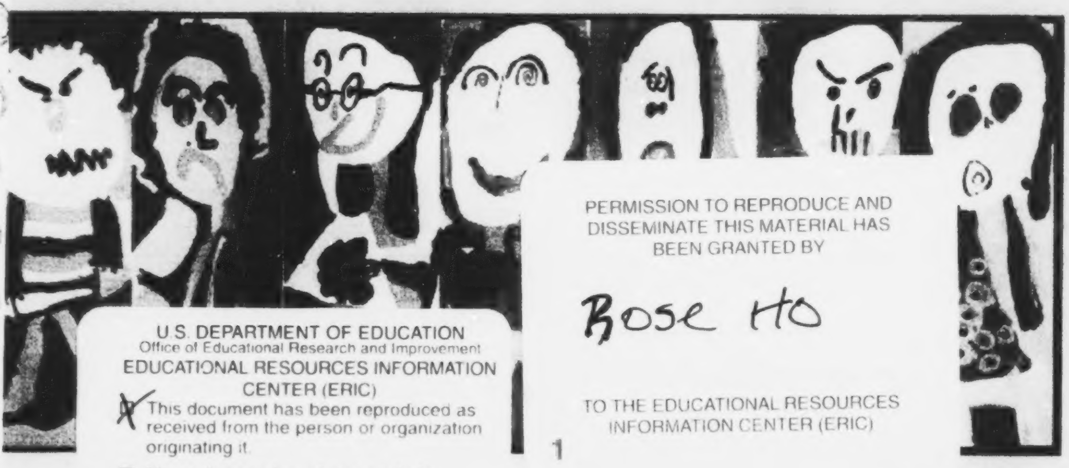

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The Salvation Army Child Care Services

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PRESCHOOL

IMPLEMENTING
PROJECT APPROACH

IN HONG KONG

Rose Ho

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This book is published by The Salvation Army Child Care Services
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Cover : Project "Emotions" drawings by five-year-old children at The Salvation Army Nurseries
http : //ccs.salvation.org.hk

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FOREWORD

The teachers and Child Care Services staff welcome the Quality Education Fund project 1789. It is a Quality Circle Project in action.

With the project, some new areas and ideas for exploration have been found and need more in-depth study. The research has reaffirmed that Project Approach teaching definitely has positive effect on teaching and learning, for both students and teachers. Exhibition-on-Wheels also gained support from parents. Although there is quite a number of staff changes in the QEF project, they are immediately recruited at the right time for the right type of work and the staff turn-over is a blessing in disguise.

This book has two parts. The English part is mainly a report of the project on Training, the Action Research, the On-line materials etc.. Interested party may find the training notes useful. Action Research has been a favourite subject in schools and many are floundering in how it could be carried out. The statistical results may be a proof but the most important result is how it can help the teachers to teach better.

The part of the book in Chinese is not exactly a translation of the English section. It has its own titles and contents. It has incorporated some of the other unpublished articles written by me. It has also included notes that could be useful to teachers and parents. It also focuses on the actual implementation of the Projects in our classrooms. However, the Action Research Report has been translated in full. I hope readers will find the projects and guidelines valuable.

Rose Ho

ACKNOWLEDGEMENTS

We thank the Quality Education Fund and The Salvation Army for the financial support of the project.

Heartfelt thanks to the participating staff and children of The Salvation Army Nurseries to make this colossal project possible and completed on time.

I also thank Miss Winnie Koo for translating the research into Chinese and compiling the report in a book-form for publication. Miss Emmy Chung and Peggy Chung have helped also.

Special thanks to Dr. Nirmala Rao who served as consultant to our research. The monitoring team has also given advice and support for the project of Implementing Project Group Work, a project funded by the Quality Education Fund from 1998 to 2001. Thanks are also given to our nursery supervisors, especially Miss Leung Yuen Shan, Miss Ada Cheung Suk Lin, Miss Ivy Lai Kar Man.

We also appreciate the stimulating talks of Professor Lilian Katz and Dr. Sylvia Chard on Project Approach in the seminars held specifically for our staff in The Salvation Army.

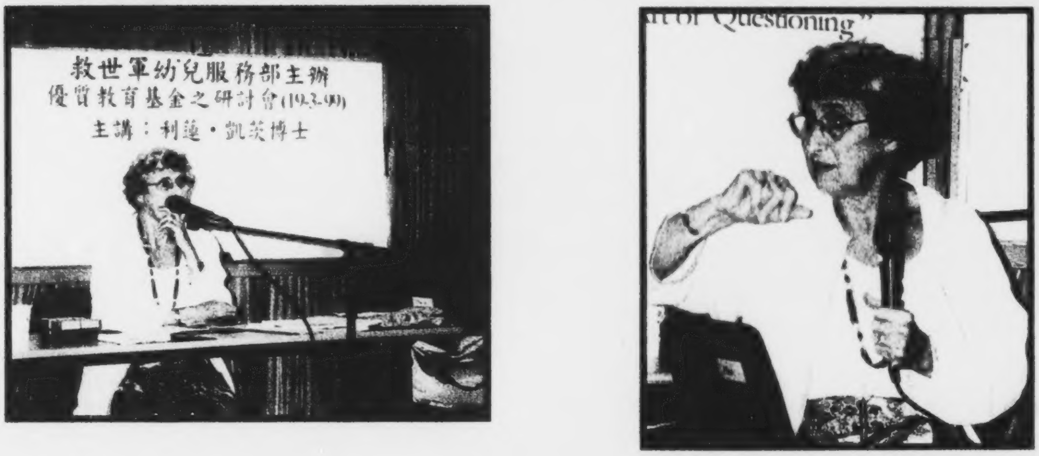
Dr. Raymond Lam of the University of Hong Kong, Dr. Sylvia Opper and Dr. Lorna Chan of the Institute of Education, are people we would like to thank too for their support to our Project.

Dr. Raymond Lam - The University of Hong Kong & Mr. Fung Man-Wai- Promotion and monitoring Sub-committee of the QEF.

Dr. Loran Chan - The Institute of Education.

Lt. Colonel Ian Southwell - Officer Commanding of The Salvation Army.

Intensive Training on Project Approach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優質教育基金之研討會(19-3-99)
主講：利蓮・凱茨博士
rt of Questioning"

Professor Lilian Katz talking on Art of Questioning

救世軍幼兒服務部
衍生課
DR.SY
一九九
教育

Dr. Sylvia Chard after a day's seminar on "Emergent Curriculum" with staff of Child Care Services

Welcome Dr. Lilian Katz
he Salvation Army Child Care Services
uality Education Fund Seminar (19-3-99)
Emergent Curriculum"
救世軍幼兒服務部主辦
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Initiation of Project at Overnight Camp in Stanley

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Training Workshop (1) -- Listening to Children

聆聽幼兒
Listening to children

Training Workshop (2)
-- Emergent Curriculum
and Creative Drama

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Action Research
on
Project Approach

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THE SALVATION ARMY CHILD CARE SERVICES
Implementing Project Group Work Project Report

Project Objectives

I. The primary objective of this project was to shift teaching from a teacher-directed mode to a less teacher-directed mode. In order to achieve this, a training programme was provided to upgrade the skills of teachers in implementing project work. An Action Research was also carried out to validate the effectiveness by measuring both the performance of teachers and children. The support team had reported that teachers became increasingly aware that they should not give the answers too fast and more time and opportunities should be given to children to initiate their own learning. The projects that they completed also proved that teachers were moving from a teacher-directed mode to a more children-directed paradigm, in a continuum. As reflected in the Research and the latest project books, the children were greatly interested in their learning and engrossed in the projects. The teachers pointed out in their journals and reflections that they became more aware of giving children ample opportunities to explore and for children to learn from their own mistakes. The primary objective has been achieved to a great extent due to intensive training and support-team's continuous monitoring and discussions.

II. The secondary objective of this project was to measure the achievement of children under the Project Approach. The Action Research focuses on children's attainment in language ability, social development and self-initiative learning. The results did show favourably in these aspects.

a) From the projects, children are seen to take charge of their learning and made impressive presentation to parents and visitors. These are recorded in the Action Research projects and more fully documented in the projects in 2001.

b) The curriculum has been an emergent one and this reflects the flexibility of the teachers. Unusual topics like the "Football Team" are included. Creative teaching and learning are more easily seen as teachers could not follow their usual pattern of organizing how to teach such a topic. There is no such topic before. This is relevant to Edward De Bono's lateral thinking.
Even with the usual topic of "Shoes", children have unusual findings as they revisited the topic and asked questions of real interest to themselves and then tried to find the answers in many different ways. By exploring the sub-topics, an emergent curriculum has arisen. However, the core values of learning to express themselves,

to communicate with others, to be co-operative, and to persevere with problem-solving were still upheld.
The knowledge has deepened and widened tremendously through the project approach as seen in the various projects accomplished.

c) The teachers have been displaying their teaching of the projects to the parents as adults in most of the projects. They have also seen the various displays of the "Exhibition-on-Wheels" and learned to display more photographs with less words and more children's work. They were told to emphasize work-display with mirrors, raised dais, flow of sequence and the use of colours and shelves.Teachers still have to learn to write synopsis and not just words spoken by children without much screening and analysis of its implications. The three Quality Education Fund Expositions have helped teachers to communicate with the public what teaching and learning is about. It is another level of display for mass communication.

Indeed, the Project Approach is not just for demonstration but for practical use in our classrooms throughout the three years in all our fifteen nurseries.

d) A lot of documentation has been made, both in the notes taken in the Training Sessions and in the Project Recordings and Research documentation.

The Salvation Army Child Care Services tried not to burden the teachers with the additional clerical work and co-ordination. It is when their specific professional help is needed then teachers are seconded to participate in the research in helping to lead the students in project work and we provide the support in taping. The QEF staff did the data-input and compilation. Only two volunteer raters from the teachers' group were seconded in the afternoons to help in the inter-rating. From our experience, teachers appreciated the intensive training in year I and early year II and asked for more in-service training. Teachers in the Research Group were eager to participate and wanted us to involve them and feedback was taken seriously. Teachers' journals were kept as regular practice and they appreciated our feedback to improve their skills and to reaffirm their approach being in the right direction.

In subsequent months, more feedback would be given to the teachers and supervisors not only in the research group but also all our other operating nurseries. We wait till the Final Report is in print and teachers would have a text to refer to when we continue to train them.

The Salvation Army Child Care Services are assisted by the selected nursery supervisors who are the Curriculum Subject Group Leaders so that involvement is maximized.

The Quality Circle Concept has been practised in The Salvation Army Child Care Services since the 1980's. The co-ordinator is very interested in improving the Curriculum for the Pre-primaries. Such enthusiasm is shared by the nursery supervisors/principals. The group has led a mass of teachers in our employ. They take pride in leading the field in pedagogical improvement.

Training Programmes

1. Overnight Camp

It was the first time that the supervisors have had the experience of going through the process of conducting a project on site themselves. They were divided into groups and did their brainstorming, resulting in a web. Then they explored the Maryknoll House according to their selected topic and had a good sharing session with comments from the Project Leader as mentor.

The supervisors and assistant supervisors found the first-hand experience useful.Upon their return to their nurseries, they led the teachers through the same experience.

The camp was held to explain to all supervisors and assistant supervisors of the three-year project and the objectives so that all staff are involved and have ownership.

The supervisors learned the process of Project Approach, viewed the Reggio Emilia project "Lion" video in 1998. This video was shown again in 2001 at City Hall at the Reflections on Reggio Emilia Exhibition.

A teacher from the Hong Kong International School, Mrs. Jane Elliot, who had been doing projects and guided by Professor Lilian Katz, shared her classroom experience with children on "Shoes" and she elaborated on nurturing the dispositions of children.

Supervisors and teachers were involved in the project. Supervisors then carried out similar minicamps with the centre teachers during the Chinese New Year break in early 1999.

2. **Listening to Children**
A guest lecturer, Mrs. Yau Ng Li Tuen was invited to speak to all 200 of our teachers. The seminar was activity-oriented. The teachers played the role of a speaker and a listener in turn. They were asked to share a memorable experience with their colleagues. In the afternoon,

it was devoted to train teachers in Divergent Thinking as this is an important element in carrying out Project Approach. Teachers underwent brainstorming for as many questions as possible on a selected topic of their groups. There were 14 groups and 26 questions, it was the highest recorded number of questions raised by a single group of teachers within a short-time on one topic alone. It was quite an achievement.

3. **Art of Questioning**

Professor Lilian Katz talked on principles of good teaching and the Art of Questioning by teachers as one. We need to teach children how to tell adults of what they are thinking. "Would you give me an example?", "Can you repeat that?", "Could you tell me about this in other words?" These are opening questions that Professor Lilian Katz showed us :

- How things work?
- Where do things come from?
- What is involved?
- Who does what in our project?
- What are the tools?
- How do things happen?
- What are things made of?
- Why do things happen?
- Why do things not happen?
- How do things change?
- What caused them to change?

Teachers should refrain from asking a child just "What is it?" but invite him to " Tell me more about it."

4. **Workshop on Drama as Emergent Curriculum II**

Since the cumulative activity of Project Approach very often ends up in having children dramatising their learning besides making the 3-D models, Ms. Maria Lee of IVE, was invited to conduct a workshop on Drama and Learning by the Dorothy Heathcote Method.

The teachers were led through the process of dramatization of crisis-intervention systematically. Making-decisions and recalling past experiences made the participants more involved in their roles. For this case, empathy for the disabled was the outcome desired. The facilitator summarized the experience with the participants, helped them to focus and to analyze what happened. It worked very well with the group. With the young children, teachers have to adjust and make selections. It was a very good experience for the teachers, particularly in the well-organized process of conducting the activity. It may go well with the training "Listening to Children" for the teachers too.

5. Emergent Curriculum I

Dr. Sylvia Chard and Professor Lilian Katz spoke on the above topic in related ways. Professor Katz said that a theme could easily be converted into an interesting project. One should allow one's imagination to roam. Teachers should give children the chance to choose the topic. It can be the interest of a class, a small group or even an individual project, at first. An individual's project may get the whole class interested later at times. If the teacher does not know much about the topic, it is a good opportunity to explore together with the children needs and not to be afraid of it and drop it instead.

For emergent curriculum, it is important to know how to choose a good topic for in-depth study.

- Study something real for exploration and animated discussions.
- It gives opportunities for children to interact directly, to have cooperation, a debate, or to argue and negotiate, make suggestions, explain, or encourage others.
- The project work must be purposeful and meaningful to the children.
- It is not too broad that it does not give any direction for pursuing the topic.

- It gives opportunities to find out information, making predictions and theories, checking predictions.
- It nurtures dispositions and empathy skills etc..
- It offers writing skills, applying mathematical skills.
- It can help children to represent ideas in different ways.
- Teachers can analyze their work with the children and document them.

On the other hand, Dr. Sylvia Chard showed slides for the projects of the "Rain in the city", "The changing colours of leaves, dried leaves and green leaves, the differing yellow tones", and "The changing of light and shadows from morning to evening". These are examples of Emergent Curriculum of studies that children chose and are interested in exploring with immense learning occurring naturally in the process.

Upon our requests for basic skills as foundation for children, she did a brainstorming exercise and we recorded: expressing oneself, problem-solving, self-care, mathematical concepts, independent thinking, cooperative and socializing skills, aesthetic skills, leadership skills etc.

The Emergent Curriculum is a result of the self-learning initiative of children and topics and learning emerge from the various activities. It becomes consolidated by revisiting the findings, by dialogue with the children, discussions with the group, systematic documentation and presentations and explaining to others.

We have emphasized on the process of learning and focused on helping children to sharpen their skills in learning to learn.

Outcomes

Product <1> — Training Package

The most beneficial part was the Comprehensive Staff Development Program that had been achieved. Professor Lilian Katz and Dr. Sylvia Chard were invited to lecture to our staff through a joint venture and their notes have been documented.

Product <2> — Project Books Set

14 of the Project Books are submitted.

Product <3> — Action Research Paper Summary

The experience of the Action Research is valuable in showing us how to do it systematically and in future to avoid the traps. The findings, to a certain extent, support our beliefs that children's language, social development and self-learning become prominent in Project Approach. It also shows that the Project Approach can be applicable to Hong Kong by being carried out in small-group-teaching as a combined programme.

Product <4> — On-line Hard-copy

On-line information disseminating the details of the projects such as documentation of training seminars and workshops, action research method and results and descriptions of projects are available.

Staffing

Clerical support (10/1998) is needed in the beginning to start the project. Then an opportunity arose (10-12/1998) to hire a temporary research officer to design a pilot-project to test the original research design in the proposal. It resulted in a change in the design for 2000. Then the clerical support is combined with the project assistance/co-ordination done by one Project Officer. Much training is organized from 11/1998 to 12/1999 with the "Exhibition-on-Wheels". As the Project Officer who is a clerk cum Project Assistant has not done Research work, she decided to resign for further study in 2000 after two years with our project. Then we were able to recruit another Project Officer and Project Assistant to help with the research and data-analysis. The data have been entered by another timely summer worker.

We were able to complete the whole project in 2001.

Action Research on Project Approach

1. INTRODUCTION

The research was a sub-project of a three-year project supported by the HKSAR Quality Education Fund. The first year was for the further training of teachers in the Project Approach[1]. The second year was for the research of effectiveness of the Project Approach in selected areas. The third year was for putting results of the three-year project on-line.

The reasons for carrying out such research were mainly prompted by the prevailing pressures from parents and teachers to have academic results no matter what teaching method one adopted.

And yet, the Project Leader had her pangs of doubt because the urge to implement the Project Approach was due to its spontaneous responses to children's learning and the Approach focuses much on the images of the child and their capacity to learn. This approach differed much from the conventional teaching by detailed lesson plans with the educational objectives set by the teachers. The Project Leader was first drawn to the Project Approach by reading about Vygotsky in "Engaging Children's Minds" in which he was against standardized tests for young children. The Project Leader agreed with him. However, the Project Leader was still tempted to try using conventional research methods to measure Reading and Writing within the realm of Project Approach.

This Action Research aims to:

1. find out children's attainment in a) language ability, b) self-initiative learning, c) social and cooperative skills.
2. find out the change of teaching styles in teachers from being teacher-directed to less teacher-directed.

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[1] The Project Approach is translated by The Salvation Army Child Care Services as "計劃活動教學"and the Education Department as "設計活動", Project Approach is for children to do an in-depth study of a project, emphasizing self-initiated learning. It was termed by the Education Commission as "專題研習".

2. METHODOLOGY

2.1 Subjects

Only 4 children were selected randomly from N4 (age 5) from each of the three experimental centres. The sample size was only 12. Dr. Nirmala Rao of the University of Hong Kong who assisted much in the design of the research, said that projection would be appropriate and we needed to control the quantity of data. In future, we can apply the Revised Action Research Method to all our 16 centres for pre-primary aged children. The 3 centres were selected to represent levels of Project Approach teaching based on the output of their project books in February 1999 and past performances rated by The Salvation Army supervisors. Centre 3 was graded A for best performance, Centre 1 was B for average performance and Centre 2, graded C was of lower than average performance in carrying out Project Approach.

2.2 Checklist Design

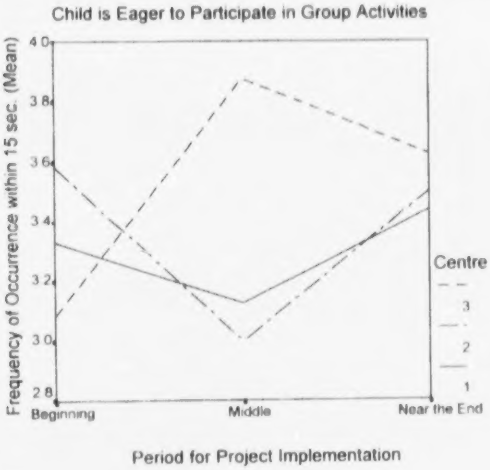
The checklist was designed by The Salvation Army Child Care Services following the advice of Dr. Nirmala Rao of the University of Hong Kong. It was designed to measure three particular aspects in child development, namely, language ability, self-initiatives and social development.

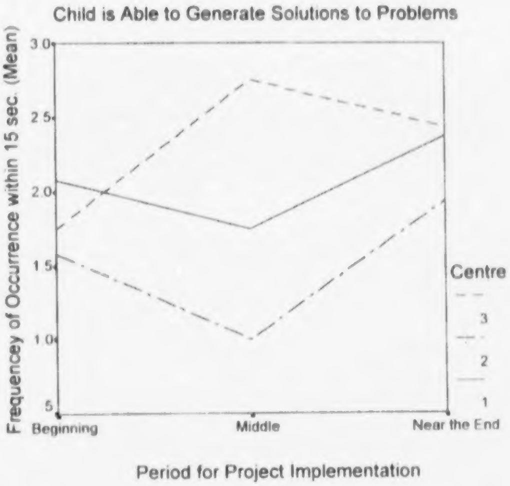
2.3 Data Collection

In the research, data were collected by different methods. The main method was videotaping classroom activities during which Project Approach was carried out. Then group work recordings, teachers' journals, children's individual portfolios and project books were documented to serve the purpose of quantitative and qualitative analysis.

2.4 Data Analysis

Quantitative analysis was used to analyze the data collected from the checklist. The checklist was comprised of numerous items with each item describing the performance of the children in different aspects. Based on the videotapes, raters had to first measure the frequency of occurrence in a particular item. According to the frequency of occurrence, they had to determine the marks each child scored in each aspect using a 5-point scale. On the other hand, qualitative analysis was used to reflect changes in teachers' attitude.


Child is Eager to Participate in Group Activities


Child is Able to Generate Solutions to Problems

2.5 Research Process

2.5.1 Videotaping

Systematic videotaping observations in the classrooms were made of the subjects. Teachers reflected on the behaviours of the child's learning and their own teaching in their journals.

The videotaping was made at the beginning stage, in the middle and near the end of the project. The subject was videotaped. The taping was done in rotation. First at Centre 3, then 1, then 2, according to the schedule of the centres. Each class was videotaped 5 times, 15 observations in all. Two video-cameras were used. Camera 1 focused on the whole classroom atmosphere and the teacher, Camera 2 on the subject child.

Sequential time sampling was used to focus on the child for 10 minutes at a time. Videotaping in the order of child A, B, C, D and then A, B, C, D.

The original design was to focus on each child for one minute at a time but the teachers said that it was too frantic and too short an interval.

The Project Leader wanted to desensitize the subjects to the video-cameras and also for the team to try out the method. So a proto-type videotaping was made ; focusing first on the children, not on the teacher. The taping lasted for 15 minutes for each child since one minute was too short.

The second dry-run was for 10 minutes and the team started to tape the teacher, and the child. The third taping focused on the child for 5 minutes, repeating twice in the sequence of A, B, C, D; A, B, C, D.

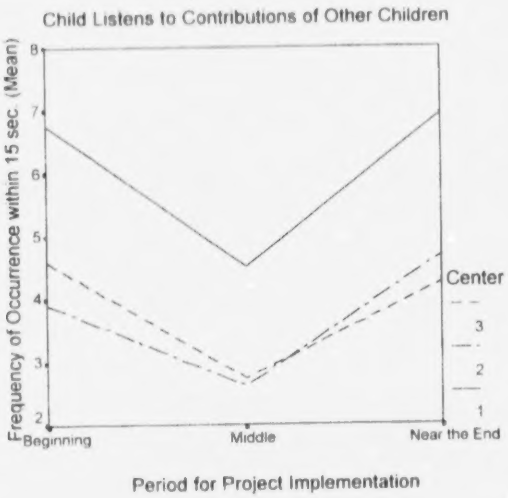
The fourth taping was at random and so was the fifth. After the third taping, a review meeting was held and it was decided that the 10 minute-taping was optimal. The fourth and fifth taping interval was then changed to 10 minutes in the sequential time sampling.

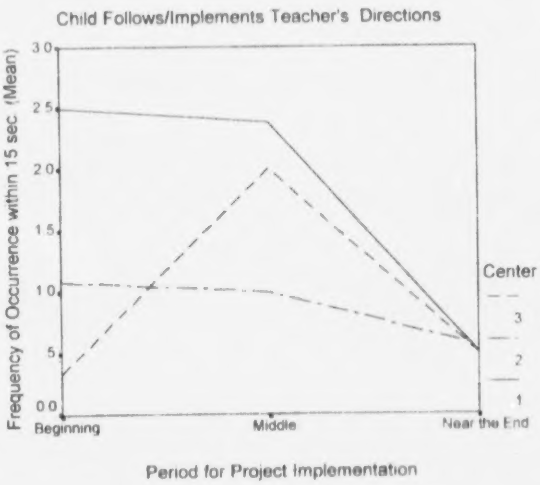
Then there was a second version for the third time videotaping. Since we could mobilize our own staff besides the QEF contract staff, we asked one experienced child care worker to tape the teaching in leading the group project and discussion. Another experienced teacher was to tape the classroom situation as they carried out the Project Approach teaching. If there were special activities, the supervisor, who had been trained more in depth in the Project Approach would tape the activities. The Project Officer just taped the subject child at intervals of 10 minutes in the sequence of A, B, C, D; A, B, C, D. There were usually 2 cameras in the room with a third when the supervisor also videotaped.

Even at the risk of over-documentation, as we rarely do research formally, we had asked the centres to select 4 more children as subjects, 2 males and 2 females, naming them Child 1, 2, 3, 4. The added data collected would be used to supplement the first research data analysis if necessary. The subjects were selected at random this time. The first research aimed to have random sampling but ended up with matched subjects for their age maturity.

There was still a third version for the fourth time videotaping, with 3 cameras at one time in the classroom. Each subject child was taped for 10 minutes in A, B, C, D; A, B, C, D. Another Camera 2 tape 1, 2, 3, 4; 1, 2, 3, 4, Camera 3 taped the class. Teachers had reflected that when the tape just showed the interaction of the teacher and one child, the rest of the group were also engaged in the meaningful activities and should be taped too.

The taping method of the teachers was completed in two sessions as designed by Emma Jones, a Ph. D. recent graduate under Dr. Rao and supposedly there were adequate data collected for analysis of teaching styles appropriate for the Project Approach. The tapes of the teachers were not for comparison of before-and-after effect, since there were only taping of the going-ons during the project and not prior or after the Project Approach was adopted for comparisons. At any rate, it was not efficacious to tape the "before" and "after". It is also not ethical to teach some students with Project Approach and learn some out even for experimentation in our own centers. All our children have been exposed to the Project Approach for over four years. In my opinion, the George Foreman's method of analyzing the "present ordinary moments" in the Project Approach could be more effective.


Child Listens to Contributions of Other Children


Child Follows/Implements Teacher's Directions

There is a lot of learning in the methodology in carrying out this Action Research. There are also the teaching and training of teacher aspects which are to be dealt with in-depth in other papers. The way to carry out such a research is new, at least to many pre-primary teachers. It is opportune that the management is interested in the research and for the Quality Education Fund to provide the financial support. The timing is also right for the teachers and supervisors who are at a stage ready to be involved in research of this nature.

The following is a summary of our learning:

1. The videotaping was quite a hassle with lots of adjustment in the process as expounded in previous paragraphs.
    1.1. In taping

    The original design was for one of the teachers to videotape the teaching sessions since there were two teachers in the room. However, this would differ from the usual teaching pattern with two teachers in partnership. It was decided to have another person to do the taping.

    From the second taping, an experienced teacher from other classes was seconded to do the videotaping as she would know how to catch the moments of children in their attempts in learning.

    1.2. Taping environment

    For the first time taping at Centre 3 and Centre 1, when the Project Leader viewed the tapes, it was too noisy to hear the children's responses and that of the teachers.

    So when the third time taping was made, the group doing the Project work was transferred to another empty classroom to continue with the discussions and work.

    1.3. What we need to heed in videotaping:
        a. Mark the time and date in the videotape.
        b. Make sure that the background is clear and not cluttered so that what will be shown on the screen is clear. This is the technique of photography and getting the right angle.

c. Do not just focus on the child or the teacher. The viewers need to know what is happening too. If a child is talking to the teacher or to another child, include the two in the frame. The viewer will know whom he is talking to and the reaction thereof.

d. Note the date, time, interviewer, interviewee, the activity that is being taped, at what point of the project it is and record it for future research references.

e. When the small reel is changed to a big reel of films, do not edit any part. Edit only a dubbed tape since the original tape need to be maintained for the research analysis or future use.

2.5.2 Inter-rating Training

Two experienced child care workers from two centres not involved in the research were nominated by their supervisors to be the raters. Then a 3rd teacher was added from a centre involved in the research, to see the differences and just to train one more teacher for rating the videotapes. Eventually, as the first two teachers were more comparable in their rating. It was decided to keep to the first two raters only for the purpose of the research.

1. At first when a difference occured in the rating, it was mainly due to the different interpretation of the tapes by the two teachers and it was solved after discussions between the raters.

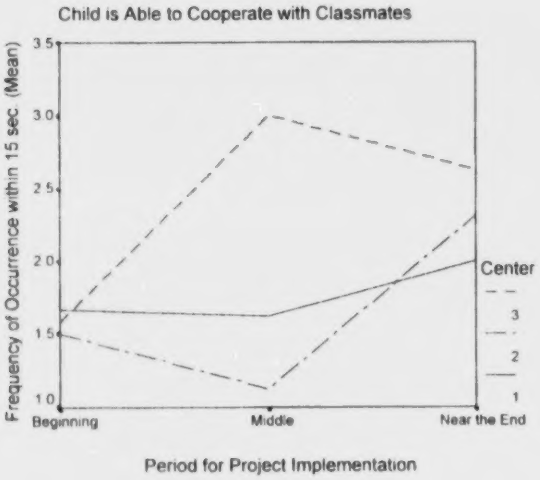
2. There were more differences in rating of teachers because the teachers spoke and expressed themselves a lot in the short intervals and one had to be very fast to capture it within the 15 seconds and then to rate for the next 15 seconds. The raters had to understand the situation and select a number of items to check simultaneously. After training, they could cope with it quite well.

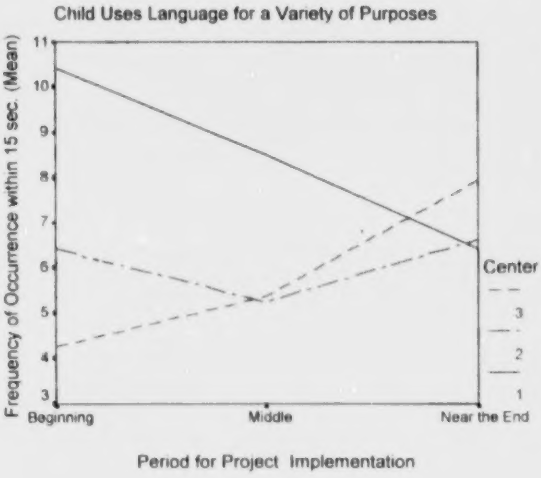
2.5.3 Rating Schedule

The original design was to rate together in a week, full-day viewing and rating the videotapes.

To avoid the factor of tiredness and boredom of the raters, it was changed to half-day rating and extended it to 2 weeks.

The rating by the two teachers took one week in the beginning to rate one centre together. After the rating of Centre 1 which showed inter-rating reliability, each was given a centre's tape to rate on their own.





2.5.4 The Checklist

This was crucial. In the beginning of the research, much time was spent on finding a Standardized Tool, which had been tested, for validity and reliability. Finally, it gave way to a self-constructed Checklist with the help of Dr. Emma Jones and Dr. Nirmala Rao.

In completing the Checklist, one need to remember:

a. Give a code to each centre, child, teacher and class and not to fill in the real name.

b. In future rating, teachers teaching the same age group from another centre will be the raters and this will be more suitable.

c. Changes in the Checklist
A number of items need to be added such as "Responds to contributions of other children", "Child is eager to raise questions on topic". Description of Activity was added to every page. Language ability

was scored to cross-check with the ones used by The Salvation Army teachers, the Project Approach Assessment I (PAAI).

2.5.5 *Reflections on the Research after the Field Work*

1. In taping
   a. The total taping sessions were 5. Each of the centre had a schedule when to do the taping as the Project Officer had to be there. The teachers found it difficult to hold the progress of the project till the videotaping team was in the centre to tape the progress.
   b. To fit the spatial arrangement of the taping, adjustment in the classroom needed to be made to provide a quiet environment in order to catch the words of the child and the teacher.

2. In filling out the Checklist, 30 seconds to fill each column was adequate. There were 15 seconds to view the tape and 15 seconds to fill the checklist.
   a. Children observation: it is better to add the use of verbal language and writing ability to have a more detailed assessment, another research may need to focus on normalizing the scores.
   b. Teacher observation: Page 2 and Page 3 are to be filled but Page 3 is to be completed only after viewing all the tapes.
   c. Assessing children: Page 4 and Page 9 are to be filled as the raters viewed the tapes and Page 5 is to be filled after viewing all the tapes.

After rating Centre 1 and Centre 3, the raters found that the children were engrossed and enthusiastic in their learning in the project. The projects had progressed more smoothly and "more naturally, emerging from one activity to another". When the raters returned to their teaching post, they still had the rating checklist in mind and tend to improve their own teaching. They reminded themselves to raise open-ended questions more and to give encouragement to children at an appropriate time and to give more opportunities to children to initiate their own learning. Teachers had to remember to allow enough time for children to make responses, before asking the next question or prompt them too fast.

It was not enough to train teachers how to raise stimulating questions at one time. They needed to be trained as good listeners and not bombard child with too many questions at one time.

3. Interviews for multiple data

   Two raters went to interview teachers and children at the respective centres. They recorded the interviews pending further analysis for future training of teachers by the Project Team.

   3.1. The Questionnaires were based on the guideline by Dr. Emma Jones and could be reviewed in future.

   3.2. Generally speaking, the five-year-old could express themselves clearly and recalled the process of the project. Children might be shy in front of the unfamiliar researcher asking them so many questions and might not speak as much. The inhibition factor was seen in group or in individual interviews when compared with their responses in ordinary days.

4. Teacher's journal for multiple data

   4.1. The journals showed some reflections and served as anecdotal evidence for children's learning. The journals could be improved as a learning process for the teachers. Comments by the mentor or supervisors were helpful. Centre 3 recorded in the journal some of the difficulties encountered in the project and this showed thinking of the teachers. They reported children tried to overcome these hurdles themselves and initiated own learning most of the time. They needed not wait for any adult's help until it was absolutely necessary to ask for help. Children also knew at that point, help was available. This was one important element that teachers wanting the children to learn to ask for help when necessary so that they needed not be frustrated but felt support was available. This learning would be useful in their adult life too.

Teachers wrote that many a time they were still too quick to give the answers to children and should give enough time for children to learn and to think of the solutions themselves. Teachers found that it was not easy to hold back but they were learning. Teachers also acknowledged learning to ask suitable questions to encourage children to think. They also reviewed the quality of the immediate responses that they made to children and learned to improve.

Teachers also thought of what was missing in their own projects, and critically looked at one's own work. They learned to improve themselves and not necessarily to be pointed out by their supervisors.

At Centre 2, teachers usually marked down the conversations of the children and reflected on how they led the group and how they had improved too.

At Centre 1, teachers recorded special events of the day and also recorded what they appreciated in the children's work and behaviour and they also reflected on how to improve their teaching techniques as they recalled the problems encountered in the process and raised many questions themselves.

5. Portfolios
At Centre 3: Teachers put in mostly individual child's work during the research for the project under study: "Learning about Electrical Fans". There were some analysis made by the teachers and some descriptions.
At Centre 2: Children's work were collected but not classified nor commented on.

The portfolio collected the child's work from different projects.
The teachers recorded children's dialogue in transcription but did not analyze their learning before and after the project.

At Centre 1: In the beginning of the portfolio, the teacher made a description of the learning ability of the child and a description of the characteristic of the child for the reader to have an idea of the ability of the child.

The portfolio has sections on Language ability, Maths, Social and Learning ability.

The portfolio also included works of the child for different projects for comparison of learning.

There were fewer individual work or drawings.
The teacher wrote a brief analysis on the work of the child.
In general, teachers need to learn more on purposeful collection for the Portfolios and make apt comments for future teaching of the child or the group as a whole.

For Pre-primary education, the portfolios should be kept simple. The first type: Best-Work Portfolios serving the targeted purpose of showing the best work of the child/group. The second type is "working portfolio", showing representative work of the child in his learning progress, with milestones. The teacher uses it as a plan for his future learning objectives.

3. RESULTS OF THE ACTION RESEARCH

3.1 Introduction

The results suggest that children in general attain a higher achievement level in three major aspects, namely I) Language Ability, II) Self-initiative Learning, and III) Social and Cooperative skills. These provide empirical evidence to support the belief that Project Approach is a special gift to children for their all-round development. The following discussion will focus on examining the three aspects of the children by using Project Approach.

3.2 Results

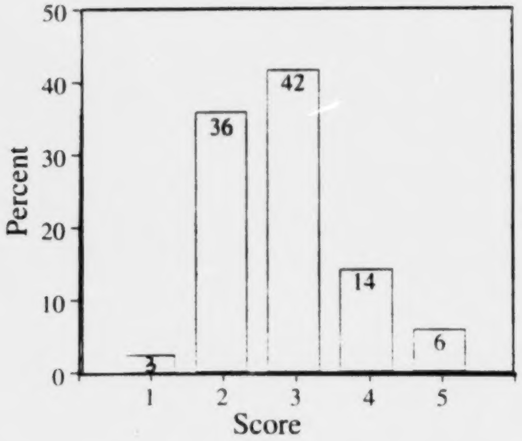
The findings present the performance of the subject children on three aspects mentioned above. The performance of each subject child is determined by the scores, based on the frequency of participation in activities related to each specific aspect. A 5-point scale ranging from 1 to 5 is adopted to indicate the level of performance. The higher is the score, the better is the achievement. The performance of children in the three stages of the project is analyzed. The following presentation only shows the average achievement of all the subject children, expressed in percentage of children for each score.

3.2.1 Language Achievement

In measuring the language ability of the children, for limitation of space here, we tend to concentrate on selected items such as their capacity in **Comprehension** and **Expression**. Among the items on the evaluation checklist, the capacity in comprehension is best shown by the item "Child is able to follow teacher's guidance and work independently".

The following figures (Fig. 1- Fig. 3) show children's standard in Comprehension at different implementation phases of the project.

Figure 1 : Comprehension : children are able to follow teacher guidance and work independently at the brainstorming stage



As shown in Figure 1, 62% of the children achieved satisfactory performance in Comprehension above score 3. 20% of these children had already developed a comprehension skill at high achievement level for preschoolers.

As the project went on, the children became more capable in language comprehension as they carried out their own project work. Figure 2

Figure 2 : Comprehension : children are able to follow teacher guidance and work independently at preliminary stage of investigation

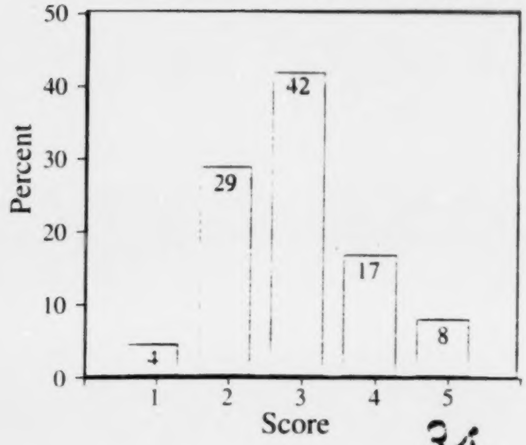
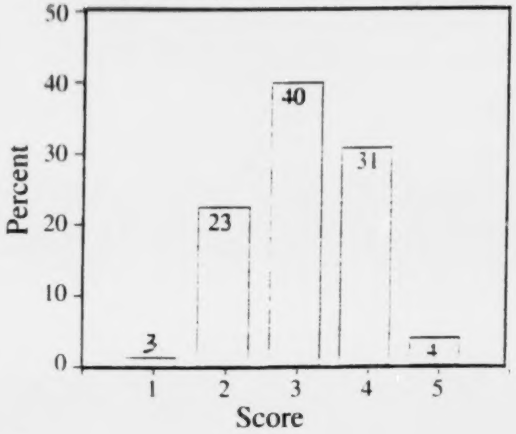


Figure 3 : Comprehension : children are able to follow teacher guidance and work independently at later stage of investigation



showed that the percentage of children who had high achievement in comprehension skill rose to 25%, 5% more than the beginning stage.

At the later stage of investigation, more and more children were capable of developing a comprehension skill at high achievement level. Figure 3 showed that the proportion of children having above average comprehension skill had reached 35%, a 15% and 10% increase when compared with the first and second phases respectively.

When it came to **Verbal Expression**, the item studied was "Child is able to express himself/herself clearly". To be specific, what we meant by the statement was that children were able to talk about something meaningful in a logical and organized way. In the brainstorming stage, as shown in Figure 4, 63% of the children were able to express themselves clearly. 13% of the total had been able to express themselves quite clearly at score 4 level. Later it could be seen that there was an increase in the number of children who were able to express themselves in a highly clear way.

Figure 4 : Expresssion : children are able to express themselves clearly at brainstorming stage

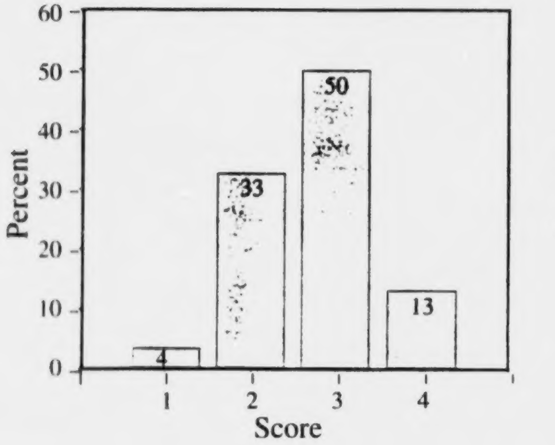
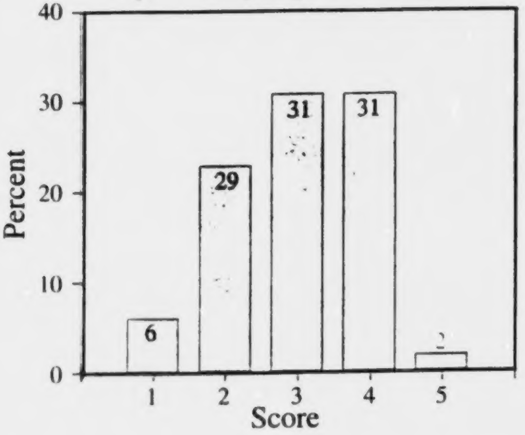


Figure 5 : Expresssion : children are able to express themselves clearly a preliminary stage of investigation



The percentage rose from 13% to 31% (Fig. 5), more than double of the previous figure. More importantly, 2% of the children were able to

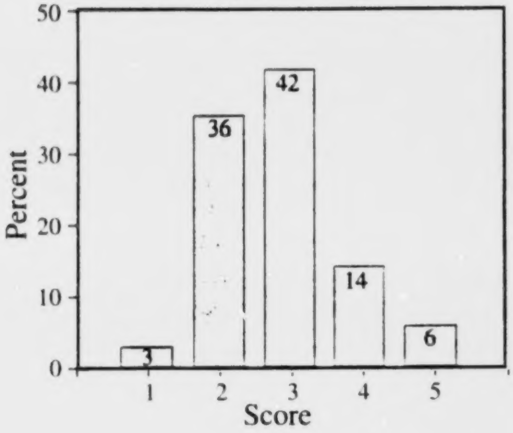


Figure 6 : Expresssion : children are able to express themselves clearly at later stage of investigation

express themselves in a well-organized manner. The figure reached 6% later in the mature stage (Fig. 6).

Improvement in both comprehension and expression supports the statement that children develop their language ability through being active participants in interactions with others (Opper, 1996). Interacting with others and eagerly participating in the activities were key elements in the Project Approach. This can be reinforced by the item "Child is eager to participate in group activities". As the percentage of children who were eager to participate at a higher degree increased, there would also be an increase in the percentage of children achieving corresponding levels of language development. At the brainstorming stage, 81% (Fig. 7) of the children was interested in taking part in the activities. In the same period, 62% and 63% of the children achieved an above average standard in both Comprehension and Expression respectively (Fig. 1 & 4).

During the period of preliminary investigation as shown in Figure 8, 96% of the children were eager to participate in the project. This time,

Figure 7 : Participation : children are eager to participate in group activities at brainstorming stage

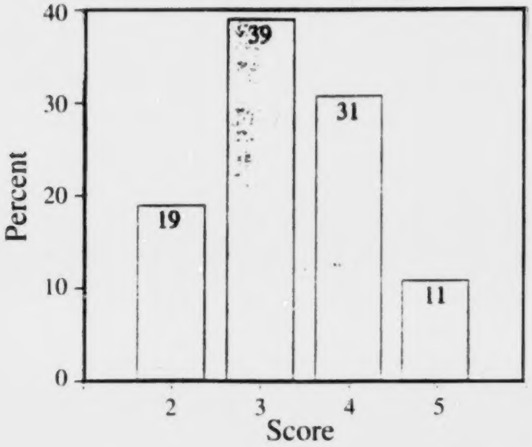
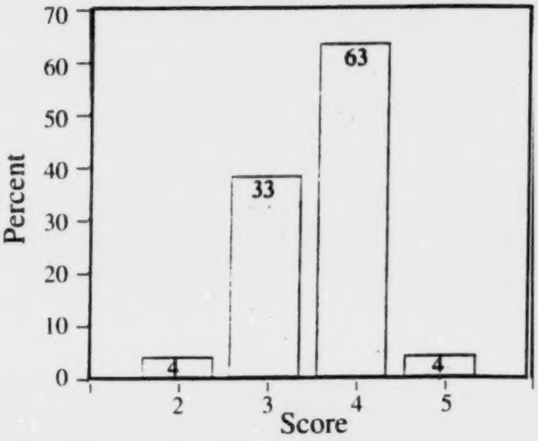


Figure 8 : Participation : children are eager to participate in group activities at preliminary stage of investigation



the percentage with language ability at an average and above standard had slightly risen from 62% & 63% to over 67% & 64% (Fig 2 & 5). Although at the later stage of investigation, 86% was keen to involve themselves persistently in the activities (Fig 9), the proportion of children who had an above average standard in comprehension rose to 75% (Fig 3).

The results in correlation between greater degree of participation and higher levels of language development are significant. During the initial stage of brainstorming, only 42% of the children were eager to participate in the activities. The percentage of children who attained a high standard in comprehension and expression were 20% and 13% respectively. By the time it got to preliminary stage of investigation, the enthusiasm of the children increased slightly, leading to a increase in the percentage of children who were eager to participate. 67% (Fig 8) of the children were very eager to participate. The percentages of children having high comprehension and expression skill were 25% and 33% (Fig 2&5) respectively. At the later stage of investigation, the percentage of those who became very eager to participate was 57% (Fig 9). The percentage of those with high comprehension skill had seen to rise further to 35% (Fig 3) whereas the percentage for those with high expression skill had a mild decrease, from 33% to 20% (Fig 6). This could be explained by the fact that children were engrossed in the mental and physical work of model-construction and they would tend to talk less.

After the analysis of I) Language achievement of children in the Project Approach, we also studied the II) Self-initiated Learning and III) Social Development of the children in the research.

Figure 9 : Participation : children are eager to participate in group activities at later stage of investigation

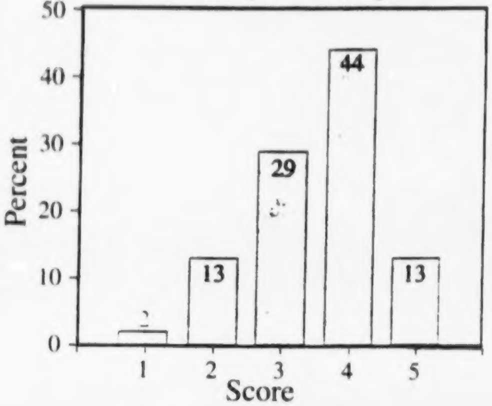


Figure 10 : Stay-focussed : children are able to stay focussed on task at brainstorming stage

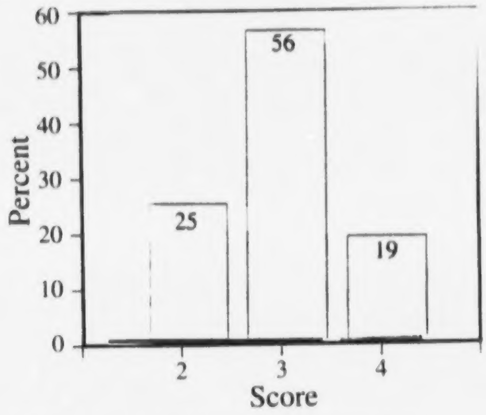
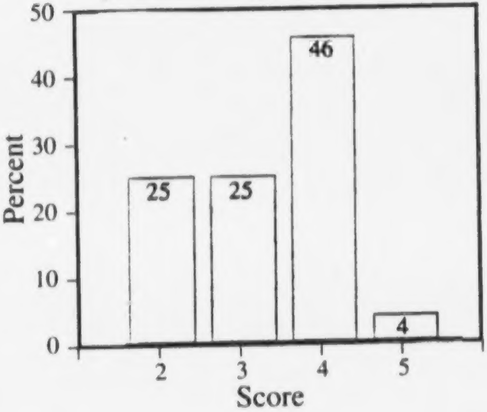


Figure 11 : Stay-focussed : children are able to stay focussed on task at preliminary stage of investigation

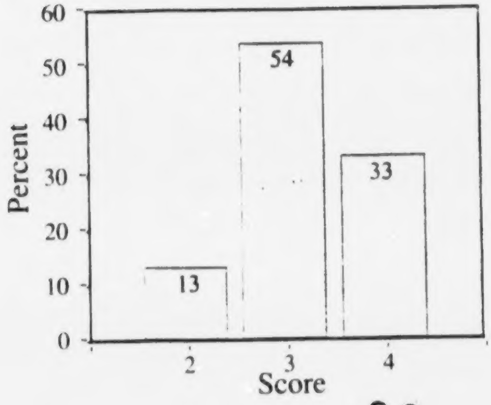


3.2.2 Self-Initiated Learning

Besides the process recording of the Project Research which was to be a qualitative research more than a quantitative research, only three significant variants were discussed for Self-initiated Learning viz. whether children were able to stay focussed on a task (perseverance and curiosity), whether children were able to generate solutions to problems (problem-solving), and whether children make contributions to group work (participation and co-operation).

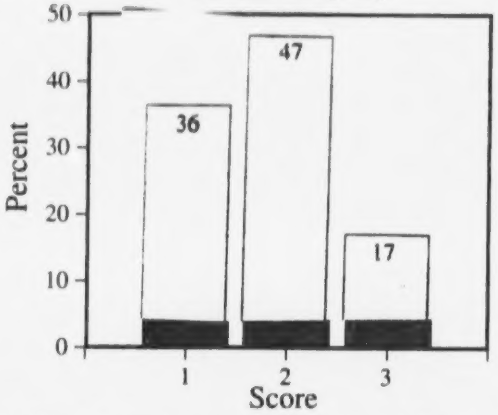
During the Initial stage of the project, 19% scored a high 4 and nil for very high score in staying focussed on the task (Fig. 10). In the second stage, 46% scored high and 4% scored very high, children were self-motivated in the Investigation Stage (Fig. 11).

Figure 12 : Stay-focussed : children are able to stay focussed on task at final stage of investigation



However, in the Final Presentation Stage, it dropped to 33% scoring a high 4 with 54% having an average score of 3 at the same time. It showed an increase in the interest of the class as the project developed (Fig. 12). At first, 25% of the children had only a little interest in the project but at the end of the project, there

Figure 13 : Problem-solving : children are able to generate solutions to problems at brainstorming stage



was 87% of the class was interested and only 13% were not really excited by the project. On the other hand, this could be explained that children had completed their project construction and it remained to be explained to others.

At the same time, we might need to think about what to do with the 13% in the class who were not really excited about the project. It was also a common phenomenon that children's interest could grow with the other children in the class project. Their ownership grew as they started to participate more in the activities. There were always children who might not be interested in this project but interested in other individual projects.

For Problem-Solving, in the Initial stage, it was more on raising questions and expressing oneself. Children could demonstrate their language skills more appropriately than their problem-solving skills in this phase. Therefore, it was not surprising that they scored a low 1-3 points in the beginning, with 17% at the average score of 3 (Fig. 13). It rose to score 4 with 8% and 8% at score 3 in the second stage (Fig. 14) and then at the construction and final investigation stage, there were more opportunities to solve problems arising naturally from the events. It rose to 35% with children being able to generate solutions to problems (Fig. 15).

Figure 14 : Problem-solving : children are able to generate solutions to problems at preliminary stage of investigation

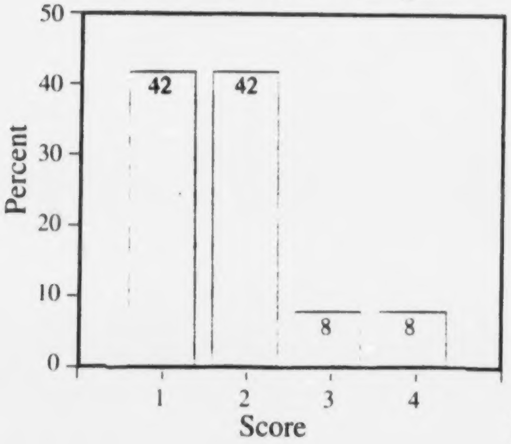


Figure 15 : Problem-solving : children are able to generate solutions to problems at preliminary stage of investigation

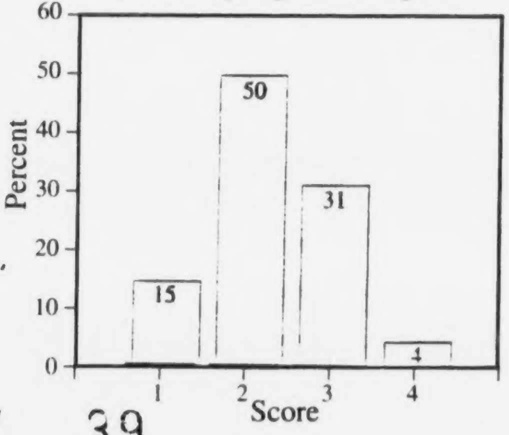
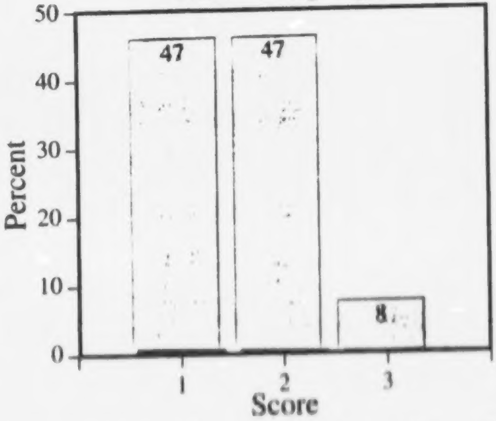


Figure 16 : Cooperation : children are able to cooperate with classmates at brainstorming stage



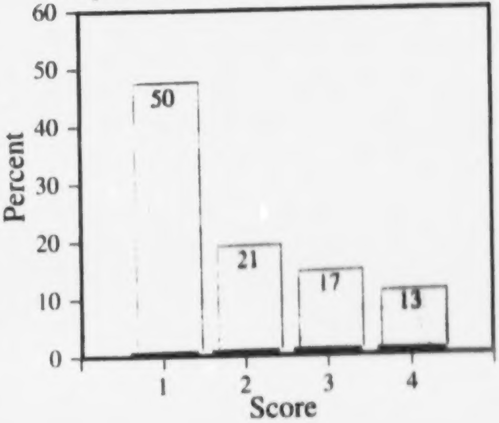
In the Problem-Solving, besides frequency, one has to look at the quality of the problem solved too. It can be seen in the projects: Fans and Jade Market. Children had a high order quality in problem-solving. In the design of this research, it was a measure of frequency of occurrence which was commonly used in psychological research. The occurrence of problem-solving can be one or two or three in a particular project. The quality of problem solved was vital to the interpretation of the data collected.

The project book which records the process is more reflective of the children making the various contributions in the group work. They cooperate well in achieving a common goal, helping each other out and also contributing to each other's efforts and are indicative of their motivation in self-initiated learning.

3.2.3 Social Development

On Social Development, we focus on two major factors: i) Children are able to cooperate with classmates and ii) Children are eager to participate in group activities. In the Initial Stage, children tended to score low in the cooperation with others as it is mainly in the brainstorming stage and each child raised questions of interest to himself mostly. All are between the scores of 1-3 (Fig. 16).

Figure 17 : Cooperation : children are able to cooperate with classmates at preliminary stage



In the preliminary investigation stage, a higher occurrence was seen as 30% was between score 3-4 (Fig. 17). In the final presentation and consolidation stage, a still higher percentage of 58%

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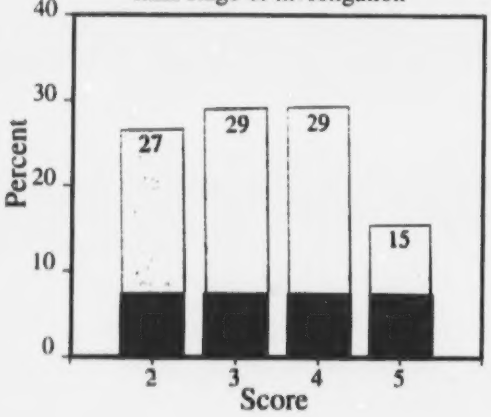
scored between 3-4 (Fig. 18).

Figure 18 : Cooperation : children are able to cooperate with classmates at final stage of investigation



For the factor of ii) Children being eager to participate in group activities, 42% (Fig. 7) scored a high 4-5 as they joined in the discussion. However, in the preliminary investigation stage, it was 33% (Fig. 8) in the frequency of occurrence at average 3-4 level. The process showed that at this time they were engrossed in their mental or non-physical participation, and close co-operation was not reflected in the scores then.The raters agreed to this observation. In the final stage, children had a lot of findings from individual or small group investraden and were engaged in the presentation of their projects so it rose to 86% (Fig. 9) with the scores of 3-5, a high level of attainment.

An overall score of 39% was also shown by children showing "their understanding of the importance of other children's participation". They learned to listen to others and accept ideas of others besides their own.

3.3 Conclusion of the Research

One could conclude that in the Project Approach, children's interest was sustained at a higher percentage than conventional teaching. In measuring their participation, an overall 87.6% scored the average 3 and above to 5. It could be interpreted that the children were interested in the project. Their interest also grew with the progress of the project, as the low scorer decreased from 19% to 2% in the final stage. This had been observed to be a common phenomena in Project Approach. The interest of the peers and the atmosphere of the classroom using the Project Approach had a positive influence on the learners.

In fact, cooperative efforts had been much stressed in the Project Approach, both in the class presentation and small group presentation.

The Salvation Army Nurseries staff also tried to steer the interest of the parents in appreciating group effort and not just interested in their individual child's work. At the same time, the Assessment Tool devised by the Child Care Services also provides assessment of group and individual child's achievement for further planning of teaching. Nevertheless, the tool, SA/PAAI needed further validation. The teachers in The Salvation Army were familiar with it when we introduced it in 1997. To familiarize teachers with it and not to over-burden them, it was adapted from an individualized tool to a class-profile tool. In 2001, it could be used as an individualized tool again with further adaptations to meet local needs. We could carry out more action research.

In the research report, the items were grouped into 9 major areas as shown in the bar-charts. The 5 sessions of taping had been grouped into 3 stages, the Initial Stage includes the Brainstorming, Preparatory Discussion and Listing of questions. The Investigation Stage included the finding of answers by interviews, by excursions etc. The Final Stage was usually used in constructions showing the children's learning and presentation to parents and visitors etc. Such groupings of items had already been designed in the research design and the data were compiled accordingly.

The different stages had a direct influence on the different responses of the children. Each stage had some key areas which were characteristic of that stage. Therefore, we had to interpret the data with this in mind. In future, when other Action Researches in Project Approach were to be carried out, this would be an important factor to be considered.

All in all, it had been a good learning experience for the teachers to do the Action Research as they reflected in the meetings that they had to learn how to think and to think faster and in many ways in lateral thinking. As there were two or three cameras facing them and they knew this was recorded, teachers took a more serious attitude in their teaching in the Project Approach way as they tried to remember the basic philosophy and principles and applied them in teaching.

It was extra work but within their ability. The teachers said that they valued the experience and met the challenges without grumbles.

It was a good training. The teachers and raters had a good understanding of the system and could return to their centers to train others.

It may not be necessary to prove beyond reproach that the children in the Project Approach Programme excel better in language ability. It does have documentary proof that they did well in language. They have also shown positive results in Self-initiated Learning attitude and Thinking skills. This leads us to repeat: Never Underestimate Children. The Language Learning can be more readily assessed if the teachers can pay more attention to transcribing and interpreting the words of the children as children tell them about their drawings. Teachers then analyzed the words and behaviour to see the thinking of the children, their concepts and understanding of the world. Also, teachers then think of how to help the children develop further, children's subsequent reading of their own handwriting and that of the teachers as dictated by children are in line with the Language Experience Approach. More reading of stories that are related to the topic can be reinforced. Besides stories written by children, episodes in their journals can be read with the writer, a child or with a small group or whole class at school and at home. Children are given opportunities and encouraged to share their learning and their joy of learning with others.

We were satisfied with the results, particularly we had learned how to carry out an Action Research for Project Approach and this might be an example for many schools to follow and they would do a better research, using the experience we had started out and in future we could reconstruct other checklist questionnaires for other purposes using the same videotapes. We could collect other data using similar research method of checking the frequency of occurrences within a stated period.

The scores of data could prove to a certain extent that the average scores of children in Centre 3 assumed to be more adapted in Project Approach for this period did show the best scores in table 2.4, as were "Listens to contributions of other children", in table 2.7 and "Talking to the group" in table 3.3. Children actively exploring materials and staying focussed on task also support the strength of the Project Approach.

The occurrences were within short intervals and were deemed to be high. This proved the value of the Project Approach. Teachers had also shown to move from a teacher-directed to a less teacher-directed teaching paradigm, in a continuum, making progress month by month.

The teacher's style was seen to be less teacher-directed in the graphs and supported in the accompanying Anecdotal Notes by the teachers as they reflected. They were more aware of giving children ample opportunities to explore. This was also true in the Teacher's Interviews and teachers felt their own growth.

We are positive in the implementation of the Project Approach. For the purpose of this research, we have excluded the Mathematical Concepts because The Salvation Army had adopted the Montessori method in the teaching of Mathematics separately. The Project Approach, however, gave opportunities for children to apply their learning in mathematical concepts.

Teachers could add word-charts to be more systematic in their language learning. To further prove that Project Approach teaching can enable children to cope with the academic requirement in the primary schools, we had collected their report cards in the primary schools and they showed good grades.

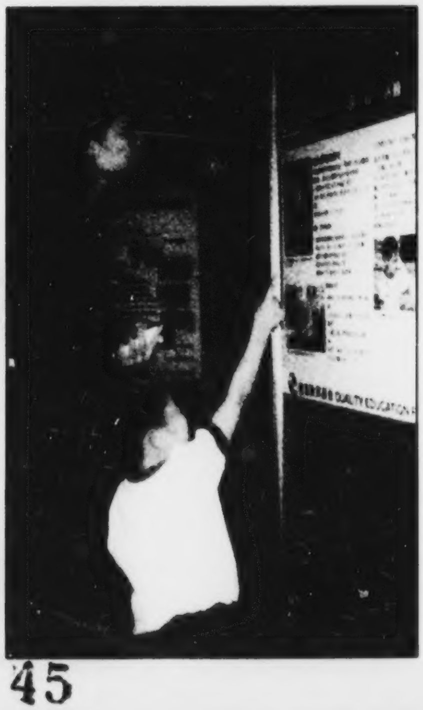
The Project Approach is an application of sound learning theories and we would like to see it being adopted in the mainstream learning and not just as an interest-group after-school activity in the primary schools. Wider application of this teaching method is envisaged to be in line with encouraging lateral thinking to meet the challenges of the 21st century. This research also gives rise to room for other researches such as amenable qualities by different phases of the Project Approach.

Insights: Implementing Project Group Work by The Salvation Army Child Care Services

The teachers and Child Care Services staff welcome the Quality Education Fund project 1789. It is a Quality Circle Project in action. With the project, some new areas and ideas for exploration have been found and need more in-depth study. The research has reaffirmed that Project Approach teaching definitely has positive effect in teaching both for students and teachers. "Exhibition-on-Wheels" also reaffirmed support from parents.

The primary objective of this project was to shift teaching from a teacher-directed mode to a less teacher-directed mode. In order to achieve this, a training programme was provided to upgrade the skills of teachers in implementing project work. An Action Research was also carried out to validate the effectiveness by measuring both the performance of teachers and children. The projects that they completed also proved that teachers were moving from a teacher-directed mode to a more children-directed paradigm, in a continuum. As reflected in the Research and the latest project books, the children were greatly interested in their learning and

ducation Reform



engrossed in the projects. The teachers pointed out in their journals and reflections that they became more aware of giving children ample opportunities to explore and for children to learn from their own mistakes.

The secondary objective of this project was to measure the achievement of children under the Project Approach. The Action Research focused on children's attainment in language ability, social development and self-initiative learning. The results did show favourably in those aspects. The knowledge has deepened and widened tremendously through the project approach as seen in the various projects accomplished.

Besides the learning boards for children, the teachers have been displaying their teaching of the projects to the parents as adults in most of the projects. They have also seen the various displays of the "Exhibition-on-Wheels" and the three Quality Education Fund Expositions have helped teachers to communicate with the public what teaching and learning is about. It is another level of display for mass communication.

Indeed, the Project Approach is not just for demonstration but for practical use in our classrooms throughout the three years in all our fifteen nurseries. A lot of documentation has been made, both in the notes taken in the Training Sessions and in the Project Recordings and Research documentation. The Quality Education Fund grant has given us the impetus to focus on in-depth training, the collaboration with the University of Hong Kong researcher to do the Action Research. It also enables us to put our experience on-line. Most of all, it helps us to have a sound foundation to continue with the Project Approach in teaching.

The Salvation Army Child Care Services have tried not to burden the teachers with the additional clerical work and co-ordination. It is when their specific professional help is needed, then teachers are seconded to participate in the research in helping to lead the students in project work and we provide the support in taping. The QEF staff did the data-input and compilation. Only two volunteer raters from the teachers' group were seconded in the afternoons to help in the inter-rating.

From our experience, teachers appreciated the intensive training in year I and early year II and asked for more in-service training. The teachers in the Research Group were eager to participate and wanted us to involve them and feedback was taken seriously. In subsequent months, more feedback would be given to the teachers and supervisors not only in the research group but also all our other operating nurseries. We would wait till the Final Report is in print and teachers would have a text to refer to when we continue to train them.

As a whole, we feel an excitement in completing the QEF projects, especially for No. 1789. We anticipate to continue with the experimentation and follow-ups and documentation of the Project Approach - The Salvation Army Child Care Services way. We believe this is one of the best teaching approaches and in line with the Education Reform.

Children observe themselves at different angles through the mirror.

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學前教育

在香港

推行「計劃活動」教學

專題研習實錄

何少梅

優質教育基金

贊助

救世軍幼兒服務

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作　者：何少梅
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序

教師和幼兒服務部的職員欣然接受優質教育基金贊助的「計劃工程活動」，這個計劃亦實踐了優質圈的理念。

在這次計劃中，我們發現了好些新領域和創新的意念有待深入探討。行動研究再次証明「計劃活動」教學法對教師和學生皆有莫大裨益。巡迴展覽亦再次肯定了家長對教學法的支持。雖然人力資源幾經變動，幸而每一階段的研究員都能勝任職責所需，所以人手變動實為一種祝福。

這本書分為中英兩部份，英文的部份主要報告了教師培訓、行動研究和把計劃上綱的詳情。教師培訓的筆記可供有興趣的人仕參考。行動研究是很熱門的課題，許多學校都在摸索進行研究的方法。統計數據給我們一點驗証，但研究的過程和怎樣幫助教師去改善教學才是最重要的。

大家要知的是中文部份並非英文版的翻譯本，各擁特色，中英部份亦宜閱讀，當中輯錄了部份作者撰寫而未經出版的文章，也加入了一些筆記迴響意見，可供教師和家長參考。這部份集中記述了進行「計劃工程活動」的情況。行動研究報告則有全文中譯本，若讀者覺得書中的「計劃活動」實錄指引有討論價值，可電郵至ccrc@netvigator.com，救世軍希望藉此設立香港Project Approach Forum，大家砌磋改善教育。

衷心感謝優質教育基金和救世軍資助「計劃工程活動」的進行。同時感謝救世軍幼兒園的園長、師生、家長積極的參與，使這項計劃得以順利完成。

項目研究員工古詠欣小姐亦將部份文章翻譯成中文，協助編整計劃活動報告印刷版等事宜，再由救世軍幼兒服務的羅雪儀小姐跟進成書。連同其他參與這項計劃的前研究員包括鍾潔愉小姐和鍾凱雯小姐，本部亦說聲謝謝。

特此鳴謝劉麗薇博士擔任這計劃中「行動研究」的顧問，給予許多的時間和意見。「計劃工程活動」獲得優質教育基金資助進行為期三年的計劃，特別成立的監察小組曾給予寶貴的意見及支持，實在感謝。更要多謝的是梁婉珊園長、張淑蓮園長和黎嘉敏園長及各位曾參予的救世軍同事們。

亦感謝凱茨教授和夏克博士為救世軍幼兒服務主持富有啟發性的研討會。

最後，亦感謝香港大學教育學系助理教授林裕康先生、蕭岳佩博士及香港教育學院幼兒教育學院院長陳鉗笙教授對本計劃的支持。

香港大學 - 林裕康教授

香港教育學院 - 陳鉗笙教授

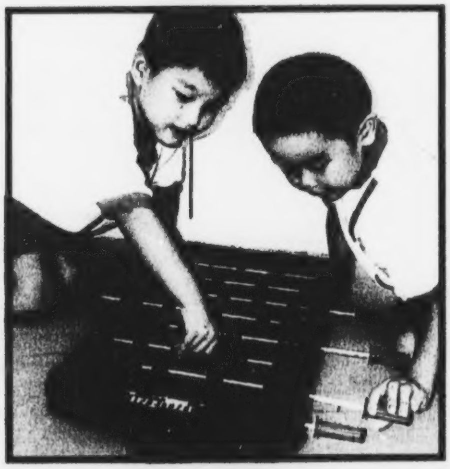
林裕康教授及優質教育基金推廣及監察專責委員會會員馮敏威校長

足球隊　　5歲

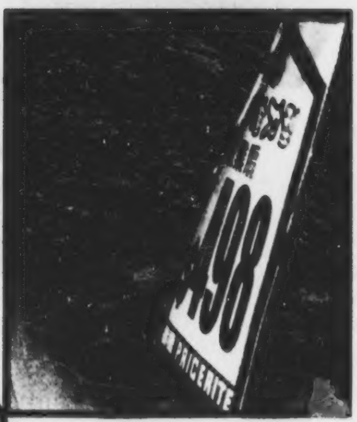
幼兒熱烈討論踢足球的規則

參考書籍

討論分工、分責



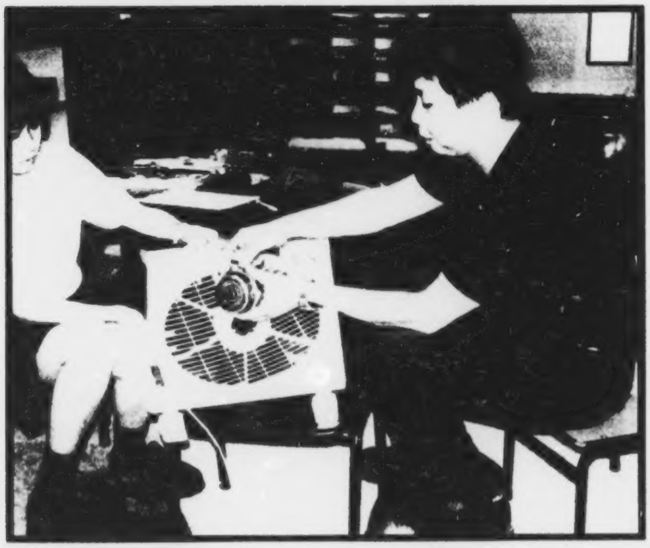
女孩子也積極參與足球隊的組成及出賽，家長功勞很大，是家校協作成功的一個例子。



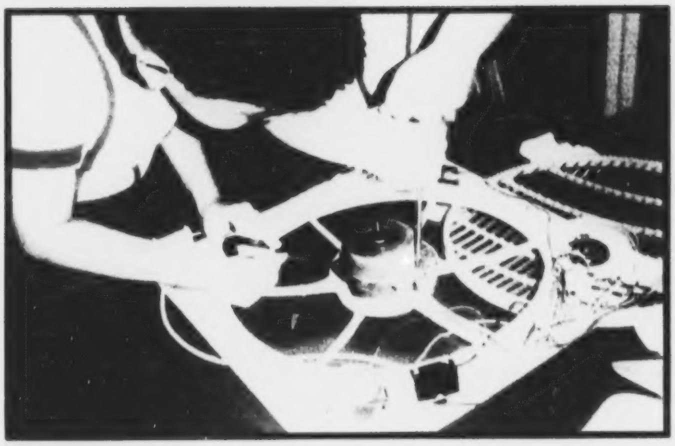
風扇　　5歲
幼兒興致勃勃地討
論風扇

幼兒拆開風扇
研究內裡的摩打

到電器零售店
參觀，加深了
幼兒的經驗，
並豐富了
討論的內容



家長是我們的資源



不要低估幼兒
的潛能

只要幼兒對所學
深感興趣，
學習自然突飛猛進

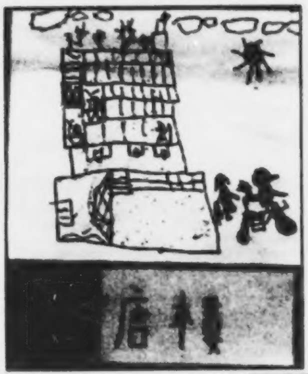
在香港推行「計劃活動」(設計活動)教學

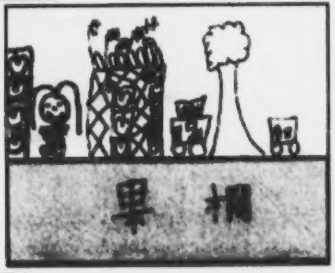
選擇主題

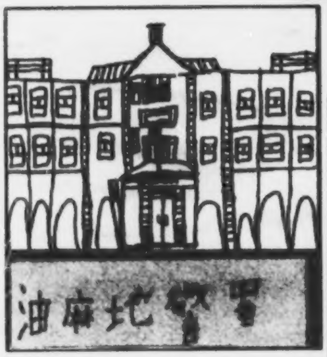
究竟孩子對那類題材最感興趣呢？我們可以不斷重覆提問孩子。不要打斷他們的思潮，讓他們幻想及作出假設。但教師切勿將這個理念視為計劃活動的必要原素，因為並沒有一定的配方或法則去激發孩子的興趣。教師必須要明白怎樣才是出色的教學，這是一種專業精神。有沒有良好的師生關係？有沒有尊重孩子？尊重他們的想法？他們的個性？他們的努力？

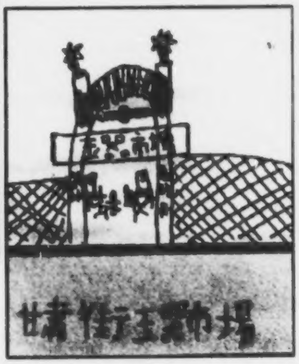
往往教師的問題在於同一時間內完成過多的事情，我完全同意凱茨教授的說法。明白這一點是解決老師長期負擔過重的主要關鍵。我們從不要求教師按特定的配方或法則來帶領活動。對於經驗較淺、訓練不足的教師，他們只能按步就班，我可以理解及接受這一點。可是我們不能為新教師而停下來，雖然他們必經學習階段的磨練。只要教師有帶領計劃活動兩年以上的經驗，已能掌握箇中的技巧，能將不同的材料加以調配整合，製造出一個富有意義和充滿歡樂的學習經驗。在現今知識發達的年代，每個人都需有敏銳的觸覺，在短時間內作出正確的決定，成為一個精明的人。教師即使錯過一至兩個步驟也不要緊，重要的是孩子能夠學到有意義的知識，達到部份我們所定的教育目的，那也算是個不錯的計劃活動了。這樣對教師計劃發展其他技能及豐富往後的學習經驗，編排其他活動或小組學習也有幫助。在「認識我們的社區」計劃活動中——幸好教師沒有嘗試探討所有分題如玉器市場、果欄、榕樹頭等。教師利用網絡進行討論，還有實地觀察。那他們有做訪問嗎？他們曾到玉器市場實地觀察，製作了一個玉器市場的模型。是在討論時決定製造模型

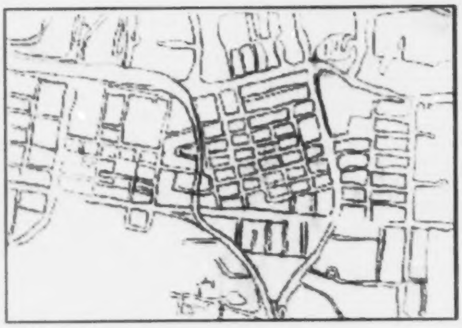
還是在實地觀察後才有這個想法呢？他們還有甚麼新發現嗎？玉器市場在那一年建成的呢？他們的營業時間怎樣？檔主在營業前要準備些甚麼？玉器交易會用一些手語嗎？怎樣分辨玉器的真偽呢？那裡有寶貴的珠寶呢？











整段記錄方法

做記錄是個十分普遍的活動，最重要的是我們需要多少的記錄才能達成目的。因此我們需要一個精明的老師剔除一些沒有代表性的資料。我提議一類文件夾(portfolio)內只需展示最出色的作品，計劃和進行活動的撮要及分析。另一類記錄幼兒

學習進度、連習作例証(work sample)及分析幼兒所學，以便計劃日後的學習。

雖然孩子在以上計劃活動教學中，有參與玉器市場的記錄工作，但是否已是最大的參與呢？我們需要檢視文件夾，看看孩子有沒有翻看他們自己的記錄？對自己所做的事有甚麼評價？有值得加以學習的地方？計劃活動的記錄報告中，教師要經常提及孩子的姓名，以突出他們的個性及成績作為一種鼓勵。相信家長會喜歡這種做法，但我們更希望將家長的著眼點轉向小組及整體成績之上。我在九七年自美國研習回來後，曾經提倡小組合作的學習成效，而我們的家長工作小組更嘗試推行班際檔案及成績表。雖然我最後還是打消了這個念頭，但我們並沒有放棄把這個想法逐步實踐。當時的時機尚未成熟，家長也未能接受只是小組學習的整體成就，而非個別的成績。無疑家長欣賞「足球隊員」的合作精神，倘若將同樣的情況套用在他們子女的學業上，家長還是比較喜歡看到那張成績表而非一個活動中的整體表現。我們需要將家長的注意力從孩子的身上轉向小組及團隊的成績上，先從小組的成果著眼，再細看孩子個人的成績。這就能發現孩子從群體中可以吸收到比個別學習更多的知識。這是另一種學習，如何彼此合作以達致一個更高的目標，而又不致忽略個人的學習，這樣才能摒除自私、培養建設社會、國家的高尚情操。

不管怎樣，直接記錄孩子的姓名是最簡單的做法，教師也能做到這一點。選取重點作記錄實在不容易，只有專業的教師才能做到。

教師每天都需要預留時間寫日誌，我們的教師也在寫日誌，但不是每天都能做到。事實上，在學習推行「計劃活動」教學時，他們是需要多寫日誌以便反思。此外，教師還要經常問自己「孩子從活動中學到了甚麼？」「我應該怎樣做才能令工

作更流暢及有效率？」我認為我們的教師應發問更多這類的問題。

不要低估幼兒的能力和智慧

成人必須緊記「不要低估孩子的智慧」這個基本原則。教師向孩子發出的提問和提示反映出我們很多時都忘記了這個基本原則。我建議教師應給予孩子充足的時間去重覆思考和作出回應，不要向孩子發問連串的問題，扼殺孩子的思想空間。教師會在沒有必要時幫助孩子，使孩子失去從嘗試和探索中學習的機會。然而家長和教師又高估了幼兒讀、寫、算的程度，往往做出「揠苗助長」的事情。

教師需要學習一個全新而又十分重要的技巧，就是教導孩子先嘗試自行解決問題，但在必要時不要氣餒，懂得尋求別人的幫助。在「風扇」計劃活動中，孩子學會了如問題解決不來，便應向老師討教。教師於是建議他們用另一種較堅固的物料。這是重要的學習，成長後人們也需要學習向別人求助，而不是去了結自己的生命以求解脫。孩子需要學會用溫和及有禮的態度向別人求助，需要學習有禮貌地表達自己的意見。教師亦要以身作則，教導孩子以禮待人，懂得和人溝通。

朋輩互學

計劃活動的理想是混合不同年齡的孩子一起學習。孩子從同伴身上所學習的事物，比教師所教授的要多。這一點完全符合蒙特梭里教學法的原則。我期望孩子能透過混合組增進彼此學習的機會。可惜老師和家長多未能領略個中的好處，往往不喜歡混合年齡的班別，而不懂利用這學習機會。

凱茨教授指出：

(一)千萬不要將「教育」和「驚喜」混淆

我完全同意她的見解。原因是有趣的經驗並不一定是一個良好的學習經驗。因此教師不應只重視安排有趣的活動。當計劃的探索逐步深入，孩子會有無窮的發現，這時教師應該從中訂立明確的學習目標。我們的教師需要學習不要只求製造樂趣，有些教師仍然以為每個活動要制訂「宏偉」計劃，但我看重的是學習的過程及教學的成效而非製成品。事實上，我所要求的不單是趣味，深入切實的教導與學習才最可貴。

(二)教師應該提出不同的問題去刺激孩子思考，

在接受了發問開放式問題的密集式訓練後，教師明白到需要認真地回應孩子的問題並與孩子一起找出答案。千萬不要只是準備問題和期望得到既定的答案。真正的問題引導我們去探究和一同找尋答案。教師用不著假裝無知，以虛偽的聲線跟孩子一併扮着找答案。這是不尊重孩子智慧的行徑，也低估了孩子的能力。無怪乎教師經常説計劃活動需要很多的準備工夫，這是錯誤的做法！教師需要磨練自己的敏感度，發掘與孩子一併學習的樂趣。教師只需在孩子提出要求時才給予協助，像進行「風扇」計劃活動時那樣；在適當的時

候介入以鼓勵孩子。教師的角色是確保孩子的安全，教授一些新知識和技巧，例如怎樣使用鉗子、鐵線等。教師又要挑戰孩子是否已經做到最好，或例如幫助孩子配襯和諧的色調，到可接受為最好的顏色配襯時才停下來，我在意大利就看到導師有着這樣的嚴謹但和靄的態度。

（三）重覆主題

教師其實可以重覆地探討同一個主題，即使是同一年同一班的孩子也可以這樣做的。雖然這是需要同一位教師帶領，才能夠在過往的經驗上紮根，使往後每次探討都可以更上一層樓。若孩子希望重做「玉器市場」的模型，大家便決定進行第二次的實地觀察。這樣做可以幫助孩子自我反省，追求卓越，引發自我改善的主動性。假如孩子和教師都希望再次探討同一主題，我認為可以在學期稍後的時間再行探索。同時教師亦可以讓下一學年不同組別的孩子探索往年的主題。在再做「蛋的計劃活動」時便反映了社會心態的轉變，第一年的孩子對自己要保管的雞蛋愛護有加，到了第三年再做的時候，該班的孩子只想將雞蛋交給別人照顧。幼兒園可說是社會的縮影，反映著人的本質和一般人如家長及鄰舍的價值觀。只要有適當的時間和環境，重新再做相同的主題，對大家也有很大的啟示。對我來說，計劃活動沒有特定的常規法則。在孩子有興趣而環境又許可的情況下，我們都會投上時間和精神。常規和法則只供參考，並不是計劃活動的「規條」。教師應像醫生那樣，去感受病人的心跳脈搏，斷症下藥。

（四）新鮮主題

凱茨教授說不用怕發掘一些新題材。讓我們去構思新主題，我們使教師不

會因循，只是依以往的教學範圍去想，有着不同範疇的資料供予搜集，事實上在園內也有很多現成的材料讓孩子去發揮。假如能夠加入改善了的教師教學方式與態度，每一個主題的研究價值就更高，而擇取主題時我們須考慮主題是否符合我們所訂立的準則。

「洗車記」和「刷鞋童」都是比較新穎有趣的題材。我最欣賞香港國際學校依諾教師的地方，就是她能夠從一個全新的角度去探討像「腳」和「蘋果」那般平凡的主題。這就是創意，對計劃活動缺少經驗的教師來說，模仿也是學習的一種方式。這是鑄模法，也是互相分享的優點。我們吸取了美國全國幼兒教育學會(NAEYC)的雜誌Young Children以及有關計劃活動的書籍中的許多經驗，從八九年起開始揣摩計劃活動的精髓，在九一年參觀了「孩子的一百種語言」展覽後，我們展開了第一批計劃活動「雨」、「光和影」。現在，我希望帶領進行計劃活動多年的教師從別人充滿創意的活動中，得到一些啟示，孩子應從我們身上獲益更多。

(五) 實地觀察

教師的腦內需經常記著最好能安排孩子有「實地觀察」，但實地觀察不一定要出外的。有時在幼兒園內也能夠掌握到第一手的資料，並進行探索。不論第一手的資料是在幼兒園之內或以外獲得，只要能提供有意義和豐富的學習經驗就可以了。此外，參觀前和參觀後的討論環節意義重大。實地觀察這一點我們的教師也常做到了！問題是我們可以怎樣令實地親身體驗做得更好，而不流於一般外出活動，未發揮盡致。教師必須認真思考做每

一件事的目的，她們不但要給園長一個理由，也要給自己做事的原因。

（六）重温的重要性

瑞吉歐教學法強調知識重温的重要性。孩子需要吸收各種的經驗去掌握一個基本的概念，忙碌的生活令我們很容易便忽略了這一點。縱使教師知道孩子需要温習，可是他們沒有給予孩子足夠的時間去揣摩這些經驗。教師採取的做法是按課程教授一個概念和一種經驗。這並不是正確的做法。教師應該用心完成自己的工作，而不是為著趕快完成手頭上的工作。這個建議是我在三十年前開展小組教學時所提出的，時至今日這個建議仍未獲教師的採納。今天我還要一再提出相同的建議，給幼兒充份的時間去吸收所學。

（七）欣賞別人

教師需要學習欣賞和接納別人以及彼此學習。教學界一般被視為一個比較封閉的圈子，我們如何才能打破這個觀點呢？我們需用實際行動正視問題，不再逃避。只要教師能進一步開放自己，接受新事物，所作出的貢獻將會更大。

總括來說，計劃活動不但特別有利於孩子的身心發展，還提供了一個切實的途經幫助我們達成各項的教育目的。就經驗所得，計劃活動並不是一個新的教學法。計劃活動旨在幫助我們對焦在某些重點之上：包括教學應以幼兒主導而非教師主導，主動學習，向家長匯報的手法，較高層次的家長參與和社群參與。有一點必須注意的是，切勿讓不當的演繹損壞計劃活動的良好聲譽。如果教師自稱以「計劃活動」或「設計活動」教學的手法教學，而實際上仍採用傳統的主題教授去帶領活動，仍舊依循一貫的教法去安排一個接一個的活動，當中卻欠缺了一個最終目標，

鼓勵孩子主動學習的態度，這樣將會毀滅計劃活動的精神，阻塞其推廣，防礙更多的幼兒得益。

手鑑式的撰寫

以前有培訓教師的導師問我，「計劃活動」教學的手鑑是怎樣的？也有許多教育界人士也許會如此提問，訓練教師進行這思考式的教學是怎樣的？我一向的答覆是：「計劃活動」要寫成手鑑便不是「計劃活動」教學了，這令問者沒趣，而這樣的答覆也幫不了誰去進一步了解。後來，我也想過這一點，對一新學習者，有步驟地一步一步跟著是比較容易的，有層次地學習才能帶出一個計劃活動的形式來，過程中幼兒也是學到許多以前未有機會嘗試的學習技巧和知識。

教師除了參閱有關該教學法的理念文章，亦要「讓幼兒主導學習」，「給予充份的自行解決疑難、尋找知識和答案的機會」，「讓幼兒學習怎樣去學習」。還要實踐最重要的一環：「不要低估幼兒」。這意味著教師不應預定所有教學內容，以形式化的遊戲和學生做一次，便算是從遊戲中學習，說自己已教了學生這課題、那課題。從「計劃活動」、教學中，大家體驗到教師和孩子是有對談的，不只是教師問、孩子答。幼兒也有許多東西告訴成人的，幼兒不是空白的小不點，他們的觀察力頗強，他們的思考往往是許多成人也要探討的，所以成人要聆聽，這不是口中說說的一回事。

教師、家長聽了這許多道理，要實踐出來可不容易，難怪優質教育基金傑出學校選舉中，實踐式的「教與學」未有傑出獲獎者。所以，我也改變初衷，也來寫一課差不多手鑑式的「計劃活動」教學，並以幼兒園高班曾做過的「食物」專題探索為例子，展示一個「計劃」推行時各種基本原素。我也明白光是說要有「計劃活動

教學」精神，是幫不到教師教學上的改進，也幫不到學生有更好的學習經驗。我也明白夏克博士所寫的方案教學為何對教師比較易於接受，因為她以大學培訓教師的經驗寫下做「設計活動」教學的步驟，始終跟著去做是容易些；教師不用聽了理論後，還要自己融會貫通去思考怎樣施行出來，思考不來便理論歸理論，就是實踐不出來。

「抄作」也是學習的一部份，教師嘗試過了，有安全感了，熟悉後再行創作自如，加上一點驚喜之作，日後也能進入另一階段，多作分析、引導。這是要經過一段長久歷程，教師只要不自滿、努力學習、不斷反思，教導幼兒才能成為有意義的終身專業。

領悟到學海無涯，計劃活動教學還有許多層次。因為理想未達，先以教師們自行選出的教案「食物」為專題的例子作討論，教師是怎樣循基本步驟帶出「計劃活動」來。

(一)首先：讓幼兒作「腦沖擊」的方式，教師先帶出一談話的主題，再讓幼兒從主題聯想到任何他想到的事物，又或一些情景，什麼都可以先記下來，後來再行組織、篩選。初步沒有對或錯，這樣幼兒才不怕想到便説，這是訓練他們創意思考的一部份，各人都可以提出意見。幼兒看著教師寫下自己的提議，已給幼兒很大的滿足感了，他們也懂得自己説完，別人也應有機會説話，這又使他們明白「輪候」、「平等」的概念。長久的培育，使這些成為他們的習慣。

(二)教師也做了些預備，在地理角中，教師放有不同國家食物的參考圖書，幼

兒對日本的「壽司」和中國的「饅頭」感到蠻有興趣。

（三）談著談著，幼兒的興趣又轉到「售賣食物」的地方，竟成為他們興趣的焦點，那兒有雪糕賣、那兒有麵飽賣……

（四）最後大家決定到附近的商場實地觀察。未出發前，教師要幼兒做好預備。商場那麼大，幼兒提出分為三組進行探索。一組往快餐店，一組往酒樓，一組往其他食肆。

（五）他們擬定問題去做採訪，預備記錄售賣食物的種類、數目、名稱等。可惜幼兒的問題往往已被教師慣例所限，只是搜集一般的數字、名稱回來報告，究竟幼兒他真正想知道是否這些資料，找到了這些資料又有何用處？在凱茨教授談論「提問的藝術」時，她提醒我們可引導幼兒去尋找事物的過程，思考如果少了這些東西又如何？多了這些東西又如何？最重要的是孩子從課室中的討論、參考書的翻閱，引發到他們尋找真的想知的答案，這才是學習怎樣去學，不只是去學教師給他們的題目。在眾多的問題中，大家想想那些才是幼兒要探索的主題，那些題目可反映到幼兒原本有的概念，可能初時的假設是錯誤的，後來又如何自我糾正、確定。

（六）第二組幼兒追擊訪問在香江酒樓工作的叔叔，他們知道有乳鴿、雞、叉燒和點心售賣，幼兒也發現還有炒飯賣呢！

但教師有沒有引導幼兒盡量利用實地觀察的機會，使幼兒印象深刻，引發更多的提問，發掘更多對他們有意義的知識呢？這樣學習才更吸引，而不只是簡單的名稱、數字。

(七)那些小記者也把食肆的名稱、售賣的食物用圖畫和簡單文字記錄下來，教師也便把資料輯成一本小冊子作為幼兒的參考資料。

其實教師可引導幼兒把圖畫畫得更細緻些，訓練他們的觀察能力、美術能力、加上解釋，圖畫便不會是那麼簡單了。

(八)幼兒也是有自我批評的能力，他們覺得找回來的資料雖多但零碎，怎樣可以向家長和其他幼兒匯報呢？他們決定重新整理資料。有些去寫表，有些去畫畫，有些去把資料圖片分類：在酒樓的、在快餐店的、在上海食鋪及粥麵店等四大類。

(九)教師也實在不應避位只是任幼兒自己説。她可以在旁向幼兒提問：「你們認為這商場還需要加上甚麼的食肆呢？」

「商場沒有Pizza店，我最喜歡吃Pizza和意大利粉，應該開間Pizza Hut。」

「我希望商場有壽司店。」

「怎麼沒有麥當勞？」

「美心餐廳都幾好，有下午茶精選。」

「哈迪斯除了吃，還有波波池玩。」

「雪糕屋」、「7-11」……幼兒的意見可多。

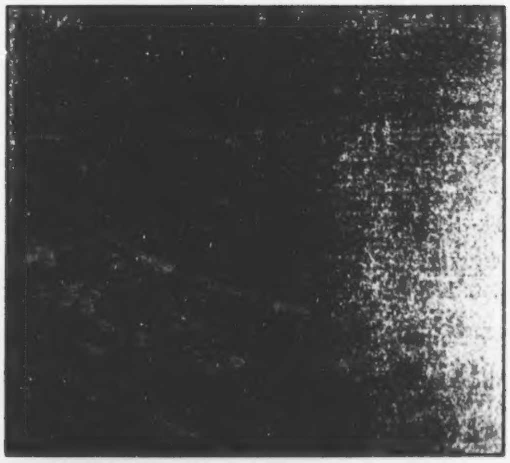
所以，幼兒主導也不是指教師全不給意見提示的，而往往教師有這誤解，，只待着幼兒發問。

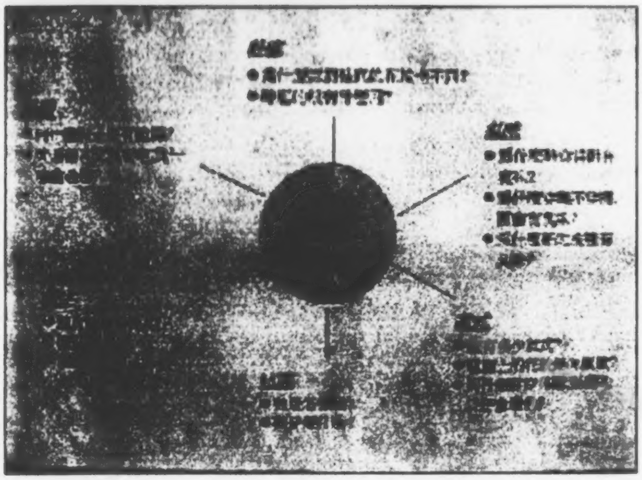
(十)要懂得去選擇焦點，再和幼兒進行討論。在教師提示下，他們列出六個標準去選定開設那一種商店最好。

(一)要是售賣健康食物的

（二）要清潔的
（三）要有座位的
（四）要好味的
（五）種類多
（六）價錢平

最後眾幼兒決定開設一間壽司鋪，並積極投入籌辦，最後教師把紀錄過程存案。這便是完成了一個基本的「計劃活動」教學，踏上了第一階。





計劃活動報告

為比較各園表現及受密集培訓後的效果，救世軍幼兒服務部要求轄下的幼兒園呈交兩份計劃活動的報告書：首次在一九九九年，第二次在二零零零年。幼兒園可以提交任何兩份在限期前六個月內完成的活動報告。

在九九年二月份的報告中，教師剛剛接受過由優質教育基金資助的培訓，因此暫時未能將所學在帶領活動時應用出來。以禾輋幼兒園為例，五歲幼兒在二月進行的活動「食物」跟同年六月時所做的活動「足球隊」已有很大分別。雖然是相同組別的幼兒，相同的教師和相同的園長，明顯地「足球隊」這個題目更能引起幼兒廣大的興趣，深入探討。以下是這個「計劃活動」的摘要：

這是禾輋幼兒園的孩子第二次探討足球隊這個題目。幼兒在九九年的時候對九八年世界杯的熱潮仍未減退，他們希望再次舉行班際足球比賽。於是教師決定放棄原本既定的主題，改為幼兒有興趣學習的「組織一支足球隊」，對教師來說，這是一個很重要的放權轉變。

(一) 幼兒有興趣學習的主題比原定課程的主題更為重要，因為學習去「學」比活動內容更為重要。教師意識到這一點，亦能放下原本的教學計劃，可見教學模式變得較多幼兒主導。

(二) 教師又給幼兒翻看幼兒去年舉行的足

球比賽錄影帶。凱茨教授和夏克博士皆提出重溫學習的重要意義，瑞吉歐的嘉德麗(Gardini)也強調這點。我們的教師也漸明白到重溫學習的重要。

(三)翻看錄影帶時，幼兒能指出自己的錯處，有幼兒犯了手球，有幼兒在球証吹停後還繼續奔跑，有一名幼兒更扯著另一名幼兒的球衣，幼兒紛紛表示不能犯規。有幼兒懂得當球出了界，追也是白費心機的。幼兒這種自我改正的態度實在值得欣賞。

(四)教師能讓幼兒充份自由分享感受，也是值得讚賞的。我們千萬不要掉進「催趕幼兒」的陷阱內。

(五)幼兒又主動提出了幾個疑問：

1. 那裡有足球場呢？
2. 足球隊有那些球員呢？
3. 我們要穿那樣的服飾呢？
4. 一場球賽需時多久呢？幼兒明顯地更懂得問「有謂」的問題，除了解決實際問題(factual questions)的提問外，也有些更高層次的「預計式」(anticipatory questions)及全面性的問題。

(六)幼兒宣傳他們的足球賽事時能應用過往的經驗，教師鼓勵幼兒重整他們的知識。他們知

道平時學校旅行時家長是需要交回條以確定出席的人數，他們便引用下來。

他們草擬了一張回條，又製作了邀請卡及橫額。

有一個有趣的現象，就是不但負責宣傳的幼兒落力非常，就連負責揀選球員的幼兒在這期間也加入了製作邀請卡，群策群力。

家長也受到孩子的感染，所有家長都迅速地交回回條，簡直是有史以來最快的一次。幼兒立即點算人數，來自一班的家長竟有三十四位會出席，差不多是全班家長支持。

幼兒很清楚分工合作及團隊合作的道理。他們知道一隊球隊有一名守門員、前鋒、中鋒和後衛。他們知道守門員是負責守龍門的，「他需要站在入球線外。前鋒則負責將足球送進對方的龍門，中鋒需要在中場位置將足球傳給其他球員射門，原來他是不可以射門的，他需要站在中場的位置，後衛是要防守著龍門的」。對五歲的幼兒來說，這是一個頗複雜的制度。但他們都能把握，實在令人再次讚嘆「不能低估幼兒」！

他們又得知球賽是有一名球証和四名旁証，站在球場的四周。兩名旁証負責判斷足球有沒有出界，一名負責更換球員，另一名負責計時。可以肯定，幼兒和教師在這次活動中學習到很多。我們認為「足球隊」這個活動實在做

得很出色，但也容易成為「滄海遺珠」，因為他們沒有「漂亮的製成品」，也沒有偉大的場面，甚至連吸引的相片也欠奉！這個計劃的成功之處在於（一）主題能夠依著幼兒的興趣，（二）教師所擔當的角色也鼓勵了幼兒和家長投入該「計劃活動」。家長感染到幼兒的熱誠，教師也得到鼓勵。這是互動的。這個計劃証明了一個好題材就是幼兒真正學習興趣的起源。

（七）教師無須擔心主題是否「天馬行空」。有時一些不是課程內熟悉的「主題」更能協助教師除去因循的框框，更有創意去教、去學。我們學習去「組織一支足球隊」雖然不是一般課程範圍，我們正正發揮「衍生課程」的作用。反個例來說，同一組幼兒數月前進行的活動是「食物」，這個主題在學前教育是相當常見的。教師和幼兒都會不經意地跟隨著一個討論模式，就是討論不同國家的特色食品。教師表示幼兒對售賣食物的地方最感興趣，所以就到商場觀察。幼兒分成三組，分別負責快餐、酒樓及其他食品。幼兒懂得教師的心理，所以他們會記下教師想要的快餐店數目和食品的名稱。他們進行了訪問，藉以找出香江酒樓所售賣的食物。其實幼兒可以從桌子上便看到有那些食物。他們能夠充份利用這次觀察嗎？從

相片中可見，幼兒甚至沒有帶備寫字畫板，所以他們寫起字或畫圖時也很吃力。幼兒回園後整理資料，一名幼兒站在一張大工作紙前停了下來，想記起在禾峯商場內有……

後來教師讓幼兒去幻想，他們便想開設一間壽司店。他們用泥膠來做壽司，又在一名家長義工的協助下用食物製作真正的壽司。在籌備的過程中，幼兒也是做了不少活動。最後，幼兒說也享受學習過程。這便只是一個基本的設計活動模式。

（八）教師又有另一枷鎖是怕重覆去探討一個主題。然而給同一組幼兒重覆做以往曾經做過的主題是很有教育意義的。幼兒能吸取過往經驗，重新研習該主題當會有更高層次的學習。幼兒和教師也不用常常故往依然，進度緩慢。重做主題是鞏固學習的良好教學模式，只要該學習是自發及自然發展的，讓幼兒有足夠的時間和適合的機會去探討和發掘多方面的問題。同時整段期間幼兒都是很投入，教師在適當的時候要放手讓幼兒嘗試和在適當的時間給予協助。教師和家人的鼓勵也是非常重要。「我全家人也會來看我比賽呢！」—惠儀興奮地說。

總括來說，這次「組織一支足球隊」計劃活動是較創新的活動教學。假如教師能協助幼兒從不同的角度去分析問題，而不是一成不變地跟從計劃活動的既定模式。以「食物」一例，教師仍能達到計劃活動基本的目的，但這是「死」的；「足球隊」則是活的。

在未來的一個學年我們只預備進行三至四個大活動教學，以便有充份時間發揮，教師能集中反省。無論如何，教師已掌握了帶領活動的一般技巧。在支援小組

的指導下，教師也能運用所學到的技巧。相比九九年時進行的計劃活動「食物」，教師和幼兒進行的「足球隊」計劃活動有了很大改進，看到教師是有更深入的反思及得著。

教師培訓《從凱茨教授 (Lilian Katz) 的啟示》

教師培訓 1998/99

九八及九九年間前依利諾大學教授凱茨博士為救世軍幼兒服務部十六間幼兒園作研討會後，幼兒教師有以下的反思：

（一）**教師實在需要學習耐心地等待幼兒回應問題。**

教師要學的是不要急於作出提示或說出答案。這是一種技巧，也是一種專業的要求。教師還需學習以邀請的語句式而不是命令形式的語氣與別人溝通。避免向幼兒作這種提問：「這是甚麼？」，代之以「你可以告訴我你畫的是甚麼嗎？」「請你看看這個,告訴我這是否正確？」我們不但要在言語上,還需以行動表示對幼兒的尊重,同時也不要低估幼兒的能力。

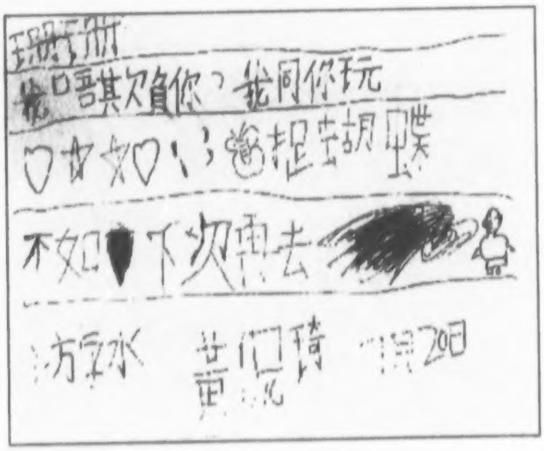
這都是培訓中得到的重點。

（二）另外，教師是決策者。推行計劃活動並不表示要放棄教師本身的決策權。根據選擇主題的原則，教師需在適當的時候作出抉擇，那時需貫徹一個主題，那時要作出改動。但切忌墨守成規，一成不變，最重要的是考慮一個決定所帶來的後果。在安全的情況下，應該容許幼兒可有犯錯的機會而再從中學習，這並非教師一貫的做法，但這是我們豎立「教育新文化」的一個起點。有時，只是那個錯誤較細，那個抉擇較好的比較罷了。在世界上

值得學習的事物多不勝數，一個計劃活動未如理想，還有許多其他活動可以補足。如果這個計劃活動比前一次那個有進步，這表示教師和幼兒也有得著了。我們可將學習經驗累積起來，還有很多好主題供我們去發掘和探索，這是搭棚積疊式(scaffolding)和花蕾漸開式(unfolding)學習的好處。

(三) 假如教師對一個主題沒有認識，她是學習需要先做一些預備，這樣才能在幼兒進行探索時作出正確的引導。可是這並不等於教師要超時工作去找出所有的答案。我相信假如教師為幼兒準備了豐富的資料和仔細的教案時，他們便會告訴幼兒有關主題的一切。這樣便剝奪了幼兒自我主動學習的機會。這也正是教師應負起，只提供一些資源的角式，以創新的手法，讓幼兒找到答案，幫助幼兒怎樣去自學。在三年的時間中，我們發現一些園內的教師原來對「幼兒主導學習」竟有這麼多的誤解，她們只是無限期地等待幼兒發問，又或是教師全不給予提示，以為這才是「幼兒主導」。

(四) 教師實在應多花精神培育幼兒性向(Dispositions)的發展，尤其是學習的態度，其堅持探索，好奇心，不怕艱苦，包容和合作精神，互相欣賞等態度，尤其重要。


我唔其欠負你？我同你玩
♡女女♡、以邀捉胡蝶
不如下次再去
方字水 黃凱琦 11月20日

(五) 教師又可以教授幼兒各種進行活動或探索時所需的技巧，如怎樣搜集資料，如提議、解說和商討等溝通技巧，這也是幼兒社化的一部份。

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(六) 計劃活動中教師其中的一個角色是懂發問的技巧去刺激幼兒學習的興趣。計劃活動的初期是運用發問技巧的時候。教師應避免發問：「你最喜歡那種食物？」這類問題，因為在未經篩選的情況下幼兒是很難作出抉擇，而篩選是需要時間去思考、比較才能答出，況且幼兒會很容易跟隨別人的答案，受他人影響而說：「我也喜歡。」反而教師可以這樣提問幼兒：「你想認識那種食物多一些呢？」

(七) 教師應引導幼兒去完成工作，並在需要時提示幼兒去思考怎樣解決問題和匯報他們的發現。

(八) 在實地觀察前，幼兒會先列出一連串他們有興趣知道的問題，教師要看他們是否在參觀後找到答案，問題是要跟進的，不是為問而問。幼兒學會分工合作，觀察完畢後他們又會向其他幼兒匯報自己的記錄。幼兒學會了接納他人的意見，這是合作中很重要的要素。

(九) 教師會將幼兒的說話記錄下來，但不必記錄幼兒的每一句說話，有發人深省的才記下。教師初學計劃活動通常甚麼也記下，更有只看相片寫字句沒啥意思，又沒有把當時精彩部份記下來，實為可惜。教師真的要學習選取幼兒一些好主意，教師可以覆述或請他覆述，再請他解釋一下自己的意見，幫助幼兒反思及進一步思考自己的提議。

(十) 教師鼓勵幼兒多利用圖畫、模型、文字、或話劇各類不同的形式向別人解說他們所學的知識。

（十一）教師要懂得好好地展示幼兒的作品。

（十二）教師又可邀請幼兒將照片依次排列，並解說照片的內容以重溫經驗。教師或家長義工可與幼兒討論怎樣用文字描述照片，和他一起記載下來，這些都是在接受了數次教學方法的培訓後，教師在帶領計劃活動的技巧上有所改善之處。在九九年教師提交了七份計劃活動報告，旨在反映教師在培訓尚未完成前的質素。到了二零零零年，教師又提交了七份新一期報告。支援小組組長黎嘉敏園長協助分析比較兩個時期的報告。

（十三）教師也為成倡導者，協助推廣「新教育概念」。教師要懂得更專業地展示幼兒學到的知識，使家長，使社會人士，使政界都明白我們做的業績。描述幼兒怎樣去探索別人的工作崗位，追溯事物的源頭，當中牽涉的人和事，背後的運作是大大豐富了幼兒知識的領域，這一切有助顯示教師的專業，賺取社會人士的尊重。

整體來說，有以下的結論：

（一）教師在帶領計劃活動的過程，有更多的活動是順應幼兒的意念（例如提問、參觀、發現等）而作伸延，幼兒主導性明顯較強。

（二）幼兒在各園中皆能向家長和同學講解計劃活動的過程。

（三）計劃活動的發展較前來得自然流暢，避免了活動為了要設計一個活動而做，

許多人在教學上，仍是活動與活動間沒有連貫的學習焦點，而敗於串燒「好玩」活動，實有失於「計劃活動」的精神。

(四) 教師能讓幼兒取得更多第一手的經驗，自行去觀察、記錄、整理、實踐活動教學的原則，而且把幼教提昇，不只是「托兒」服務。

(五) 教師開始作多元化的記錄，為思考教育。

(六) 教師在展覽活動的技巧也有些提昇。

(七) 教師學會要兼顧培養幼兒性格或學習態度的發展，不會只著眼在活動內容。

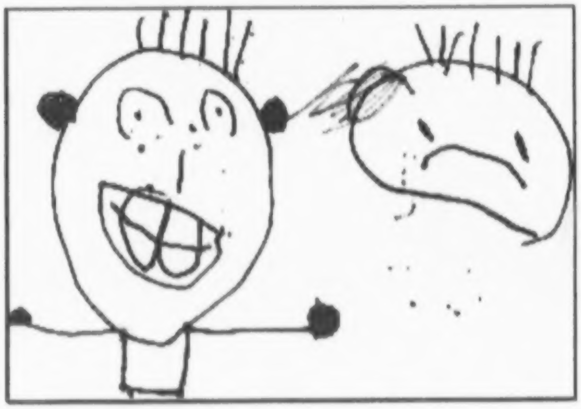
(八) 教師較能反思幼兒獲得的知識以及吸收途徑，也去想想在「計劃活動」中分開評核幼兒所學到的(一)知識技巧及(二)學習態度。

(九) 現時教師選取計劃活動的主題也來得比較生活化，擺脫了傳統課程的主題，更貼切幼兒本身的生活體驗及興趣所在，所教不再是紙上文章，或離題萬丈，不知所謂。

前瞻

教師仍需學習了解何謂「幼兒主導」、「非教師主導」這概念。

教師更要學何時參與，何時抽身作觀察，何時給予什麼的支援才是恰當。這許多都涉及深層的思考能力，教師



是否在這方面有所裝備？另外如何引導幼兒作深入思考，發展橫向思維，教師更需不斷反問自己希望幼兒從各種學習活動獲得甚麼知識，有些活動是重覆鞏固某一概念，使幼兒真的了解深刻，日後運用出來才有意思。

教師在選取活動主題的一環比較弱。部份教師仍著重不斷計劃進行一連串的活動，但各項活動往往學習意義不大或沒有關連。有些教師仍然熱衷於透過計劃活動只是著重培養幼兒的藝術發展，將所有精神都花在製作精美的圖工上。這又豈是「計劃活動」教學的目標？可能最好的教學是因時制宜，圖工又何必一定要做花邊多多的繪畫或做不知所謂的模型。教師要知學習過程才是重要的，做了些「美麗」成果，但過程空洞，報告仍局限於展示幼兒的圖工，枉耽誤大家的時間。教師也要清楚教學目標，預先釐訂教學目標，免犯只重活動熱鬧氣氛，製造驚喜的謬誤。

教師不能一成不變，我們需要有創意的教師而不是技術員。無論對幼兒和教師，成長也需要經過各個階段，教師已漸漸由教師主導轉變成幼兒主導。這是一個很大的轉變，幼兒教師在這方面的嘗試實在值得讚許，但仍須努力。

計劃活動報告範例—風扇

在一次停電中，幼兒對風扇的探索產生濃厚的興趣。A組的幼兒帶了一個小型手提風扇回園分享，他們發現風扇上有開關掣，有扇葉，有入電池的位置……

B組的幼兒更勇於嘗試去拆開一台風扇，研究內部的結構。其實「拆」的過程和「造」的過程相近，有著同一的學習機會。他們用了「十字」螺絲批、「一字」螺絲批，他們在選擇螺絲批上也花了不少時間，興趣盎然。幼兒學會了熟練地轉動螺絲批的技巧，在商商量量下，幼兒用了40分鐘就成功地合力拆開了風扇。

原來討論小風扇的A組也被刺激起來，向B組討教，他們也想拆一台鴻運扇。B組的幼兒更以師傅的姿態教別的幼兒。A組跟著指示去做，果然很順利地把所有螺絲扭開，大家都有很大的成功感。這說明「重整學習」的重要，教人者更能掌握要訣，在解說的過程中學習得以鞏固，學習者也能運用前人的經驗，把握到竅門。

拆風扇是一步驟，另一步驟是研究風扇的內部結構。

幼兒也學懂了要畫草圖作記錄，幼兒仔細地觀察電線與各部份的接駁，紅線、黃線、藍線，他們認真地學習，對豪英來說，入電芯時「+」和「−」的符號有很大的幫助，鑫權則對「ON」和「OFF」的開關掣最感興趣，還有「High」，

「Super」，「Low」的速度掣，電器店中的一台風扇深深地吸引了他。從行動研究中的行為數據也證實到這一點。幼兒繪圖也習慣了從不同的角度去繪畫，前面看，側面看，後面看，底部的樣子。

幼兒興緻勃勃地提出想做一個風扇來，他們更要仔細去再看那個已拆開了的風扇。導師給幼兒一些美勞用的鐵線去做風扇罩，讓幼兒自行嘗試去綑，鉗斷鐵線是不易的，他們最後自己想出方法解決問題。「你一邊用鉗鉗著鐵線，另一邊拿著鐵線轉幾個圈，鐵線便很容易被鉗斷的了。」一個小諸葛亮對另一位同學建議。

根據風扇的內部結構，他們不斷討論著那三塊扇葉的形狀及結構，教師按他們的興趣讓他們分組用不同的材料做扇葉。有幼兒用膠片，有幼兒用彩麗皮，有些用紙碟，其中一名幼兒子鋒更懂得用重疊的方法去將其他扇葉剪出來。

完成扇葉製作後，幼兒急不及待地拿著自己所做的扇葉放在風扇的摩打軸上測試。

「怎麼沒有風出的？」

一位幼兒明皓說：「可能扇葉太少。」

但另一位幼兒厚俊則說：「多扇葉會很重，轉得慢，便會很少風吹出來。」明皓再試自己的兩塊扇葉，但還是很少風吹出來。

有些幼兒嘗試三塊、四塊甚至五塊扇葉，但仍刮不出風來。

導師和幼兒決定邀請專家來分析：一位註冊電工蔣先生來幫忙，經過一輪深入的對風扇結構的專題研習，幼兒大開眼界。蔣先生更協助幼兒解決他們的困難：「扇葉是要斜斜地放在中間的軸心位置，這樣才可以刮出風來。」

另一個問題又來了。

幼兒已照著書本上的指示去製作摩打，但線轆還是不能轉動。

蔣先生說：「可能9V的電力太小，未能推動線轆。」

幼兒連忙說改用電力較強的電池，蔣先生說：「用濕電的風扇中仍儲存著電，孩子觸及會受傷的，所以要師傅才可製作摩打。但你們可以把設計了的扇葉裝在手提風扇的摩打軸上，配合自製的外殼，也是你們自己的創作了。」

在幼兒跟前，蔣先生還示範了「科學」通電會著燈的實驗，原來人體也會通電的。

幼兒再看自己的風扇罩，也懂得自評。

他們認為鐵線和鐵線之間空隙太多，不太安全。他們又發現其中一位幼兒孫揚所造的風扇罩既美觀又安全，於是便向他請教，彼此研究一番。

幼兒學習到互相欣賞及學習。

經蔣先生的提示，幼兒再查看那軸心，鴻運扇果然是斜斜地插放的。

鑫權更發現軸心後有鋸齒，這樣便可鎖緊扇葉了。這個發現顯示幼兒的觀察比從前細緻深入許多。幼兒照版煮糊地去裝嵌，終於完成自己造的「華富牌鴻運扇」。幼兒表現得十分興奮，紛紛用不同的紙張去測試風力，更在風扇前享受涼風。

最後幼兒向他們的爸媽舉行「發佈會」，分享自己成績的喜悅，及解釋學習過程，其中包括研究、創意、推論和引証。幼兒在活動完結後兩個多月，還記得所學過的名詞，津津樂道。

語文發展方面

在參觀過程中，他們懂得訪問的技巧，又留心觀察，抄好貨品價目，分門別類，做好記錄產品上80%的文字。他們都能閱讀及有興趣地提問學習。

(一)在製作「摩打」過程中，幼兒能自行閱讀説明書上的摩打製作程序圖，明白後按著程序去做。遇上問題時，能自行核對程序圖與自己所做的是否相符。

(二)拆開風扇後發現的「摩打」、「銅片」、「彈弓」、「磁石」等，幼兒的興趣濃厚，對這些詞彙學得很快，對各類風扇名稱也有所認識，如「工業扇」、「鴻運扇」等。

(三)慧琪説出自己的手提風扇並不普通，覆述活動過程，由三至五句句子組

成，包含名詞、動詞及加上自己的感受。

(四)幼兒多用了「因為」、「雖然」、「但是」、「然後」、「再次」、「而且」、「後來」等連接詞。

(五)句子變得更有條理，令人容易明白。

(六)在評審風扇罩時，他們也懂得運用數學中學到的名詞，如：直線、斜線、排列整齊等。

社交方面

(一)一般幼兒對螺絲批，缺乏認識，對此有點認識的豪英，儼如教師般耐心向其他幼兒解釋扭開螺絲的技巧，各人樂於聽從，他的領導才能就顯露出來。

(二)各人齊心合作磋商下，智深主動地協助明皓扭開螺絲，大家於40分鐘便完成拆扇工程。

(三)鑫權主動地向孫揚請教做風扇罩之道，幼兒養成互相欣賞、學習的風氣。

自學能力方面

(一)幼兒樂於參與及專注主動學習的精神，在活動過程中常常表現出來。幼兒對該活動很感興趣，鑫權還發現扇葉是有鋸齒的，微微插住中間，原來這樣扇葉便不易飛脫出來。在測試扇葉時，幼兒作出預測

風力的強弱，並用實驗作出引証。

解決問題能力方面

(一)有真實的製作，便有真實的問題出現。孩子也習慣了用自己的方法，推論研究去解決，試行各種方法去測試效果。如在拆風扇時，弄鬆螺絲遇上問題，造風扇罩時，鉗斷鐵絲也是一個現實問題。製作風扇時，沒風出也是問題。

(二)幼兒均能一一解決，先自行試試，在最後解決不來時，也懂得請教別人，不會氣餒及自暴自棄，懂得承受挫敗也懂得去找適當的協助。對事物抱積極態度。這是難得的，而且值得繼續培育。

(三)幼兒探究及鍥而不捨的精神，可從他們對摩打的探索、檢查的每一步驟反映出來。

(四)每天幼兒都喜歡學習。

自信及表達能力方面

(一)六歲的厚俊很有信心地向同學介紹自己設計的風扇有不同的風速，由1—10，1是最小，10是最大風力，風扇底部還有兩個托，用作平衡。

(二)在家長發佈會上，幼兒都解釋得頭頭是道，步驟清楚，用詞正確。

教師的反思

教師在其日誌上皆能反映對幼兒所學有所分析，對幼兒

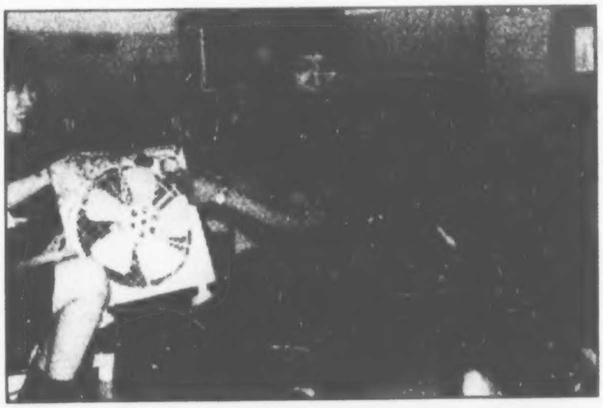
的語文能力、社交、合作、鍥而不捨的學習精神都有評論。這些活動給幼兒和教師都有成功感和一份滿足感。教師分享幼兒成功地製出一台會動的風扇的喜悅。亦想到在過程中，幼兒雖然也曾失敗，但教師能給予幼兒充份時間和機會再去探討，幼兒沒有因失敗而氣餒，反而不斷追求改善，重新檢查零件，這不屈精神令教師深深感動。教師更能體會到幼兒的學習，最重要是其過程中的學習，製成品美不美，令人驚訝與否也不重要了。

另一年資較淺的一位教師也想到自己學習到去聆聽幼兒和尊重他們的決定，這也是難能可貴的，她還覺察到幼兒向專家提問時，提問的技巧也提昇了，更為清楚問題的要點，及問題的級數也是頗有研究性的(請參考幼兒提問表)。

總結該計劃的原素，乃借用凱茨教授的總結：

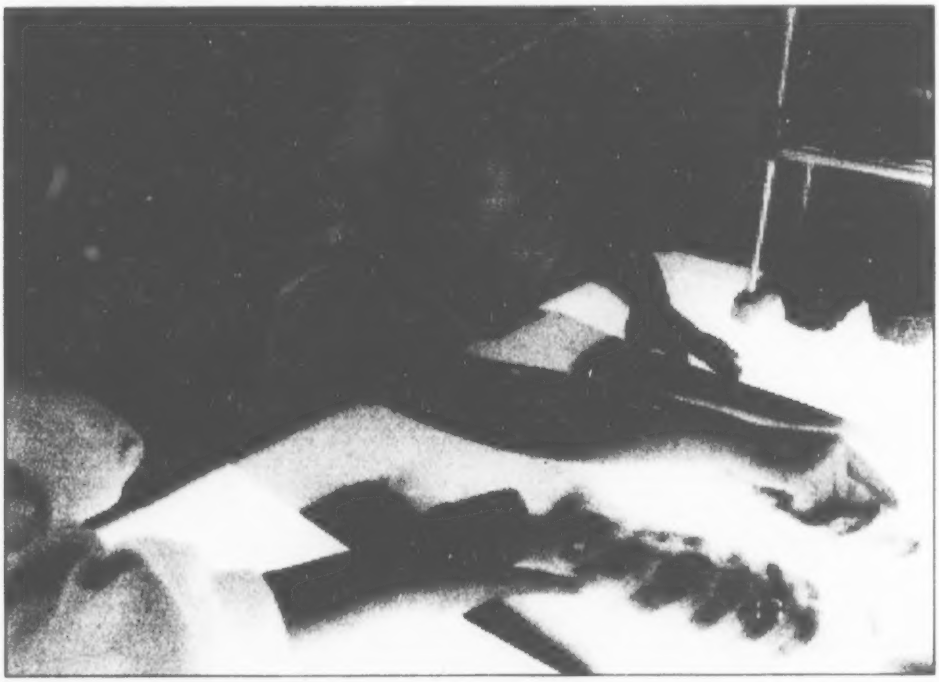
- 營造一個豐富的及有資料的環境
- 鼓勵孩子自己做事、有獨立性 (to do their own work)
- 鼓勵孩子傾談和討論
- 鼓勵孩子自己去評定對與錯 (encourage children to evaluate right and wrong)
- 究竟孩子對什麼最有興趣？可以問問孩子，讓他們幻想及預測
- 不要一下子做完所有的事 (don't try to do everything at once)
- 思考要多少記錄(documentation)為之足夠？
- 做記錄檔案時，要多有孩子的參與

- 做記錄檔案時，宜用孩子的「姓名」，如：俊彥的畫有美麗的線條，這顯示對幼兒的尊重
- 教師要預留時間寫下記錄，常問自己「我想孩子學到甚麼？」不斷尋找更好的方法令工作更暢順及有效率
- 不要低估孩子的能力和智慧
- 教導孩子如何取得別人(及教師)的協助，學習如何用「温和」及「有禮」的方式去表達
- 計劃活動若以混合組進行是理想的(可推行至三年級)如：四歲的幼兒展開及探討計劃活動，三歲的幼兒則只參與活動
- 不要將「教育」與「驚喜」混淆 (never to confuse learning and excitement)
- 教師帶出不同的提問／疑問去啟發孩子
- 不要怕「重做」計劃活動的主題，也不要怕做一些「新」的主題
- 腦海內要常記著「小組」往實地觀察(field trip)及討論是好的
- 以不同的方法，讓教師與孩子一同學習，重溫他們已有的知識
- 對其他人有讚賞，有接納他人意見的量度



孩子在計劃活動中提出的問題

1 那些不同顏色的電線有什麼用途？
2 為什麼我們所造的扇葉於轉動時很容易飛脫出來？
3 多扇葉的風扇是否會較涼？
4 摩打的磁石有什麼作用？
5 摩打是否有很多不同的種類？
6 螺絲批有多少種類？
7 我們看不到的電是從那裡來的？
8 怎樣的扇葉才能吹出涼風？
9 什麼質料所造的扇葉會較為安全？
10 螺絲批應怎樣扭才可將螺絲扭出來？
11 為什麼開風扇時會有「吱吱」聲？
12 摩打後面為什麼會有窿？
13 是誰發明風扇的？
14 工業扇有什麼用途？
15 盒面上的12，16，18，是什麼意思？
16 風扇與抽氣扇有何分別？
17 幼兒園有多少台風扇？



幼兒的提問

「樹」的計劃活動(高班)

1 什麼才是樹？
2 為什麼會有樹？
3 為什麼樹可以製造這麼多東西？
4 為什麼樹上會有蟲，是否替它抓癢？
5 螞蟻是否在樹上居住？
6 樹的年齡最多有多少歲？
7 為什麼有這麼多種類的樹木？
8 啄木鳥啄樹是否給自己做個洞居住？
9 是否每棵樹上也有昆蟲？
10 為什麼有些樹落葉，有些不落？
11 為什麼樹上有果實、樹葉，這麼多東西？
12 氣根有什麼功用，是否每棵樹也有？
13 每棵樹也有松鼠洞、蜂巢、雀巢嗎？
14 為什麼人類要砍伐樹木？
15 是否老樹才有氣根？
16 樹木有否感覺？
17 為什麼有些樹有花，有些沒有？
18 樹怎樣做成木材？

「茶道」計劃活動(高班)

19 用紅色玫瑰花沖出來的茶是不是紅色呢？
20 究竟怎樣才是合適的水溫呢？
21 要放多少茶葉呢？
22 究竟用大茶壺還是細茶壺呢？
23 飲茶對身體有什麼好處？
24 為什麼有些茶的味道很苦？
25 哪裡可以買到茶葉？
26 茶葉的價錢是否很貴？
27 要用多少時間來泡茶？
28 怎樣才可以泡出一杯好味道的茶？
29 茶葉除了用來沖茶外，還有什麼其他用途？
30 什麼地方可以種茶葉？
31 是否不同種類的茶葉有不同的泡茶方法？
32 怎樣飲茶才不會飲到茶葉？

「消化系統」計劃活動(中班)

33 究竟骨骼的作用是什麼？
34 我們吃了食物之後，會去到身體哪一部份？
35 為什麼不吃東西很快感肚餓？
36 為什麼吃太多食物會感肚痛？
37 為什麼我們會有痰呢？
38 究竟吃什麼食物對大便時會暢通些呢？

39 為什麼人能夠走路？

40 為什麼人和動物需要睡眠？

41 多喝水會使我們更乖及有益嗎？

42 為什麼食物進入口後，不會從口中流出或吐出的呢？

43 為什麼我們會嘔吐呢？

44 為什麼我們的腸會彎彎曲曲呢？

「古箏」計劃活動（高班）

45 是否需要用電源才會發出聲音？

46 為什麼每條弦會發出不同聲音？

47 那些細小的三角形有什麼功用？

48 為什麼古箏是長方形的？

49 弦線旁邊的小孔有什麼功用？

50 為什麼底部有個洞？

51 古箏為什麼會走音？

52 為什麼古箏是用木製的？

53 為什麼用手指接觸弦便會發出聲音？

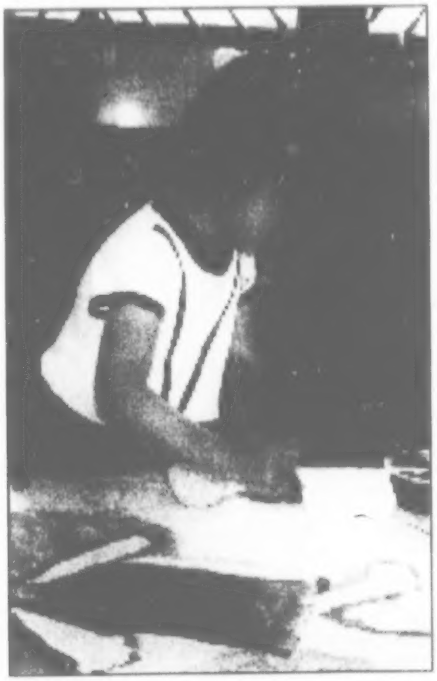
54 修理古箏，除了用調音工具，還要拿工具箱給你嗎？

55 為什麼古箏上的弦線有長有短？

56 為什麼古箏上的弦線有綠色、黃色？

57 古箏的弦線斷了，怎辦？

58 為什麼我們製作的古箏，弦線不能發出聲音呢？



「雀鳥」計劃活動(高班)

59 為什麼雀鳥身上會長滿羽毛？
60 為什麼雀鳥個嘴那麼尖？
61 雀鳥為何可以飛？
62 雀鳥居住的地方是怎樣的呢？
63 雀鳥喜歡吃什麼？
64 為什麼那種雀鳥的羽毛是這樣的？
65 是否所有雀鳥都會飛？
66 為什麼那種雀鳥的嘴這麼長？
67 雀鳥BB是否雀媽媽所生？
68 為什麼雀鳥的蛋會有不同顏色？
69 是否失去雙翼，雀鳥便不能飛？
70 為什麼雀鳥沒有牙齒？
71 雀鳥常「吱吱喳喳」地叫，究竟在説什麼呢？
72 究竟雀鳥會否互相傾談呢？
73 為什麼鸚鵡的嘴是彎的呢？
74 為什麼貓頭鷹要夜晚才出現呢？
75 雀鳥BB身上無毛，這樣牠們是否覺得非常寒冷？
76 麻鷹是否會吃人的呢？
77 雀鳥BB在蛋裏面會否被焗死呢？
78 雀鳥是否用鼻呼吸？
79 雀鳥的鼻子在那裏？

80 雀鳥有否分男女的呢？
81 雀鳥媽媽會否坐爛牠自己的蛋呢？

「古埃及探索之旅」計劃活動(高班)

82 浩維：為什麼埃及的文字與中國的不同？
83 可兒：為什麼埃及人的首飾很漂亮？
84 敏而：為什麼埃及的國王叫法老王？
85 俊岐：為什麼埃及有獅身人面像？
86 業文：為什麼埃及的地方這樣多沙？
87 卓楠：為什麼埃及人喜歡貓？
88 詠媚：為什麼埃及人要用布條把屍體包成木乃伊？
89 玉瑩：為什麼埃及人喜歡動物？
90 穎琳：為什麼埃及人喜歡帶這樣多手鈪？
91 尚志：為什麼埃及人懂得做木乃伊？

「巴士」計劃活動(高班)

92 如何才能夠成為巴士司機呢？
93 交通督導員有何工作？
94 駕駛時要怎樣留意路面的情況？
95 司機位上的鏡子是否能清楚看到上層

的情況？

96 司機如在駕駛途中感到身體不適，如何處理？

97 如駕駛途中燃料用完，會怎樣辦？

98 司機下班後乘車時，要否付費用？

99 為何新巴會選擇橙色為主要顏色？

100 我見到巴士上的樓梯是彎上去的，為什麼？

101 為何地上(巴士廠內)會有一行行的凹位？

行動研究報告

(甲) 研究背景

救世軍幼兒服務部獲得優質教育基金撥款資助，進行一項為期三年的「計劃工程活動」，行動研究是其中一個主要項目。計劃的第一年為培訓年，進一步深化教師對計劃活動的認識。行動研究在第二年進行，目的為評估計劃活動的成效。計劃的最後一年將行動研究的結果發放於互聯網上。

行動研究，旨在評估救世軍幼兒服務部轄下幼兒園推行之「計劃活動」教學法，在下列兩方面的成效：

(一) 幼兒在a) 語文運用b) 主動學習以及c) 社交發展三方面的表現，

(二) 教師從教學主導到幼兒主動學習的轉變。

進行是次研究的原因，主要是受到來自家長及教師看重學業成績的壓力。在一九九七年我在伊利諾大學一次研討中，聽到凱茨教授談到幼兒在計劃活動後未能取得優異的成績時，如何是好。我感到萬二分的疑惑，因為推行計劃活動的迫切性不是為了在標準試中取得優異的成績，而是為了提昇幼兒的學習，建立幼兒的自我形象及學習潛能。計劃活動跟教師準備詳盡教案的傳統模式有很大分別。在閱讀維高斯基(Vygotsky)的「牽動孩子的心思」(Engaging Children's Minds)時，我開始被計劃活動所吸引。他反對使用常規測試評估幼兒的能力。我很認同他的看法，但是我仍然很想嘗試用傳統的研究方法，來測度幼兒在「計劃活動」教學法之下的閱讀和書寫能力。

(乙)研究方法

研究對象

研究對象包括12名幼兒及6位教師，他們分別來自救世軍轄下其中3間幼兒園。以隨機抽樣的方式在3間參與研究的幼兒園選出4名高班學生(五歲幼兒)，調查對象共有12名幼兒。香港大學的劉麗薇博士協助設計是次研究，劉博士認為人數適中，並需要控制資料的數量。在將來，我們可以再在16間幼兒園推行經過改進的行動研究。根據一九九九年二月計劃活動報告的成績及各園的表現，分別選出參與研究的3間幼兒園，代表計劃活動教學法推行的不同程度。園3的評分為優異，園1的評分為中上，而園2的表現則屬於一般。各園的評級比較主觀。

評估表設計

在香港大學劉麗薇博士的協助下，救世軍幼兒服務部製訂了行動研究評估表，以衡量幼兒在語文能力、主動學習和社交發展三方面的表現。

資料搜集

行動研究以多元化的方式收集所需資料，其中以攝錄計劃活動進行時的情況為主。此外，幼兒的集體創作、教師日誌、幼兒個人檔案和計劃活動報告均成為定量和定質分析的依據。

資料分析

評估表上的一系列項目描述幼兒在語文、學習和社交三方面的表現。評估表上搜集所得的數據以定量方法進行分析。評估員翻看計劃活動錄影帶，計算幼兒在某一項目的行為次數，再根據行為次數評定幼兒在某一項目上的表現。評級由一分至五分，表現越好，得分越高。另一方面，定質分析則用作分析教師教學態度上的轉變。

(丙)研究過程

課室觀察採取有系統的拍攝方法，分別記錄各師生參與計劃活動時的情況。觀察分3個階段進行：第一階段為活動初期，第二階段為活動中段，第三階段為活動後期。每班觀察5次，研究共有15次觀察。觀察時需用兩部攝錄機分別拍攝幼兒與教師的情況，一號攝錄機用作拍攝教師及課室環境，二號攝錄機則用作拍攝幼兒。拍攝採取特定的次序拍攝，每名幼兒拍攝10分鐘，依次為A，B，C，D。

拍攝看來像是很簡單。原來設定用一分鐘的時間拍攝每位幼兒，教師認為時間太短。計劃負責人希望減低對象對攝錄機的敏感度，並試行拍攝方法，所以決定首先拍攝幼兒而非教師，遂將第一次的拍攝時間改為15分鐘。第二次的時間為10分鐘，並在此時開始拍攝教師。第三次的時間為5分鐘一次，以A，B，C，D的次序重覆兩次；而第四及第五次則隨意拍攝。經過三次的拍攝及商討後，大家認為10分鐘的時間最為合適，遂將第四次與第五次拍攝時間定為10分鐘。第三次的拍攝還有另一個版本，除了優質教育基金聘請的研究員，我們也動員了一名資深的教師拍攝教師帶領小組和討論的情況。另一名教師則負責拍攝班上進行活動的情況。在進行一些特別的活動時，中心主任也會協助拍攝活動的情況。研究員只負責拍攝對象，以(1)A，B，C，D的次序拍攝每位幼兒10分鐘。在課室內經常會有兩部攝錄機同時在拍攝。

我們只有極少研究的經驗，即使冒著資料過剩的危險，我們在每間幼兒園再額外選出四名幼兒，兩男兩女作為對象，代號為(2)1，2，3，4。這些資料將可彌補主要資料的不足。這批幼兒也是以隨機抽樣的方式選出。研究原是以隨機抽樣的

方式選出對象，但結果他們的年齡與設定的完全吻合。

還有第三個拍攝版本，第四次拍攝時課室內有三部攝錄機。其中一部攝錄機拍攝以A，B，C，D次序拍攝第一批對象各十分鐘。其中一部攝錄機以1，2，3，4；1，2，3，4的次序拍攝第二批對象各十分鐘，最後一部攝錄機則拍攝全班的情況。教師表示當攝錄機拍攝幼兒和教師時，其餘的幼兒也在進行活動，因此有需要將這些活動記錄下來。

拍攝教師的情況由劉博士導修的博士研究生所設定，在其中兩次觀察時進行，她預期兩次的拍攝應該能夠提供足夠的資料分析教師在計劃活動下教學態度的轉變。教師的片段不是用作比較推行計劃活動前後的分別，因此拍攝教師的次數只有二次而非三次。

進行這次研究實在有很多地方需要學習，而教師教學及培訓的資料亦詳盡記錄在其他文章中，以作將來逐一跟進，相信獲益更能擴散。這次研究對許多學前教育工作者來說都是一個新嘗試。適逢管理階層亦計劃進行研究之時，得到優質教育基金撥款資助，而教師及中心主任亦已為研究作好心理準備，各種因素造就了進行研究的契機。

以下是我們的得著：

（一）拍攝過程經過三番四次的改動。日後再做研究時，拍攝安排便不用枉費時間。

1.1 拍攝者

研究設計原定由班上兩名教師的其中一位負責拍攝，考慮到這個安排會影

響平常由兩位教師合作教授的教學模式，所以後來決定由其他人負責拍攝。由第二次拍攝開始，改為抽調其他班的教師負責拍攝。

1.2 拍攝環境

首次拍攝時園1和園3的課室環境非常嘈雜，計劃負責人翻看錄影帶時，發現收錄了很多雜音，沒法清楚聽到教師和幼兒的說話。故此自第三次拍攝起，便安排將進行計劃活動的小組到另一些課室進行活動。

1.3 拍攝時需注意的事項

i 注意錄影帶上要有時間的顯示(錄影帶上的日期也要準確)。

ii 拍攝時要確保背景安靜整潔，以保持畫面清晰，這需要拍攝技巧和選取合適的角度。

iii 拍攝時不要只將鏡頭鎖定被拍攝的幼兒或教師，觀眾需要知道現場所發生的事。若幼兒與幼兒之間或幼兒與教師之間有交流或談話，或幼兒眼望另一方，也須拍攝他所望的方向和對象，從而令研究人員對當時的整個活動情況有更全面的了解。

iv 拍攝時需清楚記錄拍攝日期、時間、對象、活動、計劃活動進行的時段等資料，以備作為研究之用。

v 將攝錄帶翻錄到錄影帶時，在未分析前，不要作出任何剪輯，避免遺漏任何資料。

(二) 評估訓練

沒有參與研究的幼兒園園長再行推薦兩名資深教師擔任評估員，後來加入第三名評估員，此名評估員來自其中一所參與研究的幼兒園，加入這名評估員的原

意是測試彼此間的差別以及訓練多一名評估員。後來發現首兩名評估員有較好的共識，因此最後只用兩名研究評估員負責記錄今次研究中的行為表現。

2.1 在訓練中兩位教師填寫評估表時所出現的差異，多是由於她們對錄影帶的內容有不同的理解，經過討論後，問題也能迎刃而解並取得共識。

2.2 評估員還是在某部份的差異較大，因為有時教師在錄影帶中的說話和表達較多，評估員需要對畫面有很快的理解，以15秒的時間翻看錄影帶，以15秒填寫評估表。評估員在需要理解畫面的同時，又要一面選擇適當的項目。這是很好的訓練，日後記錄幼兒表現時亦能適用。

1 填寫評估表的時間

研究原定以一個星期進行評估，以整日時間翻看錄影帶及評估。為避免評估員過於疲倦及沉悶，遂將評估時間由全日改為半日，延長至兩星期。評估員最初花了一星期一同評估了一間幼兒園，在大家取得共識後，便將其餘兩間幼兒園的錄影帶分給兩位評估員回園各自進行評估。

2 評估表

研究原定採用一套有高信度和效度的評估工具，後來發現這套工具並不適合測試研究的範疇，最後我們決定邀請劉麗微博士及鍾愛雯小姐為是次研究再訂定一份評估表。劉博士亦多交由其博士生鍾愛雯跟進。在一般研究方式上，劉、鍾二人協助較多，但礙於未能把握計劃活動的特質，故未能貼切訂出提問編排。因劉博士外遊關係，研究的資料搜集工作需於在三月至七月期間完成。研究主任鍾潔愉對研究方法不大認識，對計劃活動也只是兩年來從旁知悉，故只能跟

隨。計劃負責人在該段時間往外地開會，亦未能全身參與，只提出一些問題加上評估表，故在「沒問題」氣氛意識下，也就完成初步研究。所花人力、物力及後在分析工作上，幼兒服務部均投入很多，補貼優質教育基金津助。

填寫評估表時需注意：

i 給各幼兒園、幼兒、教師和班別一個代號，評估表上不應填上幼兒的真實姓名。

ii 將來若這份評估表廣泛應用於各幼兒園，建議由另一間幼兒園同級的教師作評估，這樣會較為客觀。

iii 評估表的修訂：

在評估表的初版上增加了幾個項目，例如，「幼兒對其他幼兒所表達的意見的反應」及「幼兒踴躍提問」等。又在每一頁對每項活動加以描述，語文運用的部份，為配合救世軍現行所用的計劃活動評估表(Project Approach Assessment I) (PAAI)。

3 反思

1 拍攝

i 每間幼兒園共拍攝了5次，為配合各幼兒園日常的運作，每間幼兒園也有一定的拍攝編排。教師表示因等候拍攝隊而需控制活動的進度有一定的困難。

ii 需要分配教室以便拍攝能在一個安靜的環境下進行，以便清楚收錄師生間的對話。

4 評估表

i 用30秒的時間填表：15秒翻看錄影帶，再用15秒填寫。

ii 幼兒觀察部份：在評估表中加上PAAI說話及書寫的部份以作出一個較全面

的評估。

iii 教師觀察部份：評估員在翻看錄影帶時填寫了第二和第三頁，但第三頁應在翻看錄影帶後才填寫。

iv 評估幼兒：第四和第九頁需要在翻看錄影帶時填寫，但第五頁是在翻看完錄影帶後才填寫。

評估員評估了園1和園3時發現，在活動後期，幼兒更積極主動參與活動及較初期投入。此外，計劃活動的進展也漸趨自然和流暢。評估員對評估表印象深刻，重返教學崗位時仍牢記表上的項目，緊記改善自己的教學，提醒自己要多提出開放式問題和給予幼兒適當的鼓勵，多些深入探討問題。教師需預留較多時間予幼兒思考和回答，避免在同一時間向幼兒提出太多問題。

給予教師提問啟發性問題的訓練仍未足夠，教師需進一步受訓成優秀的聆聽者，不要向幼兒提出一連串的問題。

（三）訪問

兩名評估員分別往不同的幼兒園訪問教師和幼兒。

3.1 訪問的內容以鍾小姐的指引為依據，在將來可以加以修訂。

3.2 整體來說，五歲的幼兒一般都能清楚表達自己及回想起活動的過程。有些幼兒面對著陌生的教師可能會顯得害羞，不大多說話。

（四）教師日誌

4.1 可從教師日誌看到教師的反思，引証幼兒的進步。教師可以從計劃負責人或園長給予的評語中，學習改善寫日誌的技巧。園3的教師在日誌中記

述進行活動時遇到的困難，這顯出教師一些的思考。教師在日誌中報告了幼兒主動探求解決問題的方法，這是主動學習的好例子。幼兒不會即時尋求協助，只有在必要時才會向他人求助。幼兒是知道教師在必要時是能夠提供協助，教師正希望幼兒學會不屈不撓的同時，也知道有成人的支持，使他不會感到沮喪或不願意去嘗試及形成害怕失敗的心理。

在日誌中，教師們也反省很多時候是自己急不及待要說出答案。他們也認同需給予幼兒更多時間去自行解決問題。教師表示學會了提出適當的問題去提高幼兒學習的興趣。此外，教師又能反思活動的不足之處，可見教師能夠自評。教師可以不用園長提點，自我改進，這是最好的學習。

園2的教師將幼兒的對話記錄下來，反思自己帶領活動時的技巧及如何去改善的地方。園1的教師攝錄了幼兒每日活動的環節及幼兒值得讚賞的地方。教師在記錄活動中遇到的困難和當幼兒提出難題時，都能夠提出改善教學技巧的建議。

(五) 幼兒的個人檔案

園3：在探討「風扇」這個活動報告中，教師多記錄個別幼兒的工作，還有教師作出的分析和描述。園2只記錄幼兒全體的工作，而沒有個別的記錄。教師也記錄了幼兒之間的對話，但沒有分析幼兒在活動前後語言能力的改變。

園1在報告開首描述了幼兒的語言能力和幼兒的特徵，讓讀者對幼兒有一個初步的認識。報告有語文能力，數學，社交和學習能力幾個部份。報告更比較了幼兒在不同活動中的表現，較少個人工作的記錄和圖畫。教師也有對幼兒的工作作出了分析。

教師需要繼續學習怎樣有目的地記錄計劃活動報告。在學前教育這行業中，報告實在需要既精簡，而又能達到目的。

(丁)研究結果

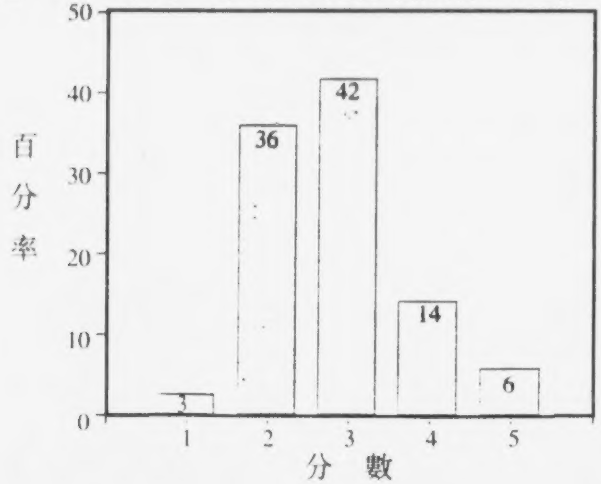
研究結果顯示幼兒在(1)語文運用、(2)主動學習以及(3)社交發展三方面的表現。評估員根據幼兒參與活動的頻率來評估幼兒在不同範疇的表現。幼兒的表現以5分來表示，得分越高，表現越出色。我們分析幼兒在活動中三個不同階段的表現，以下的結果是以百分比顯示整體幼兒的平均表現。

(一)語文運用

語文運用方面，我們主要分析幼兒的理解及表達能力。在評估表的眾多項目中，i)幼兒的理解能力由「幼兒能跟從教師指引獨立工作」一項中反映出來。在活動初期【圖一】，已有62%的幼兒在理解能力這項上得到3分或以上。當中有20%幼兒的理解能力更取得4分或以上。

當活動繼續進行，幼兒的理解能力也隨之而有所提昇。在活動中段【圖二】，理解能力取得4分或以上的人數比例已上升至25%，比較早時期上升了5%。

圖一　思索期：幼兒能跟從教師指引獨立工作



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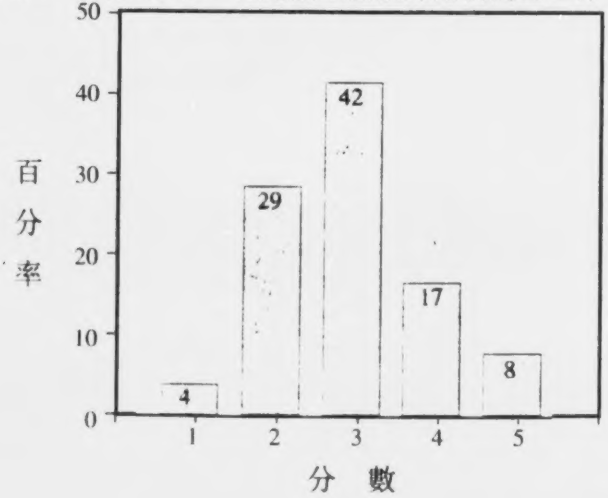
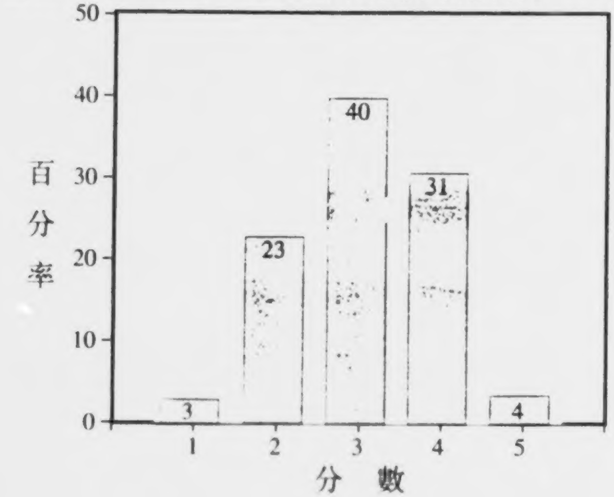
活動後期【圖三】，越來越多幼兒在理解能力一項上取得高分。這時期取得4分或以上的幼兒佔整體的35%，與活動初期及中期時比較，人數分別上升了15%和10%。

圖二　初步探索：幼兒能跟從教師指引獨立工作



圖三　深入探索：幼兒能跟從教師指引獨立工作



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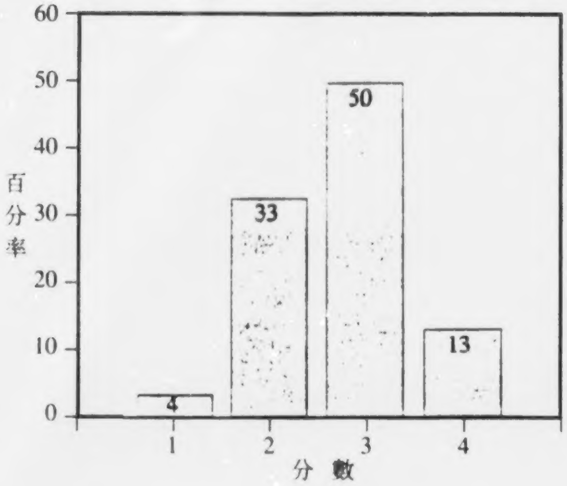
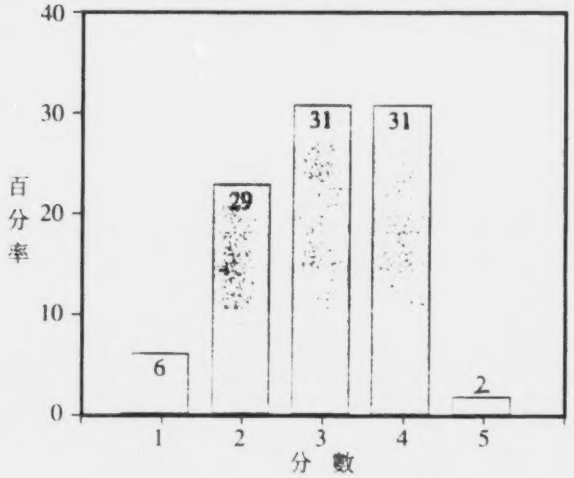
ii)「幼兒能清楚地表達自己」一項成為評估表達能力的指標，意思是說幼兒能有邏輯地說出有意義的語句。在活動初期，63%的幼兒在表達能力一項上取得3分或以上【圖四】。同一時間，已有13%的幼兒在此項上得到4分。在活動後期，幼兒的表達能力有明顯的進步，取得4分的人數由活動初期的13%上升至中期的31%，升幅超過一倍【圖五】。最重要的是，在活動中期，有2%幼兒能夠非常清晰並有條不紊地表達自己，因而在此項上取得5分【圖五】。到了活動後期，擁有高度表達能力的幼兒人數更上升至6%【圖六】。

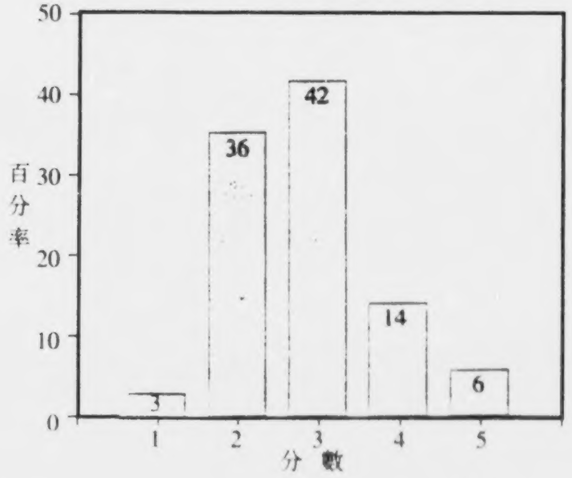
圖四　思索期：幼兒能清楚地表達自己



圖五　初步探索：幼兒能清楚地表達自己



圖六　深入探索：幼兒能清楚地表達自己



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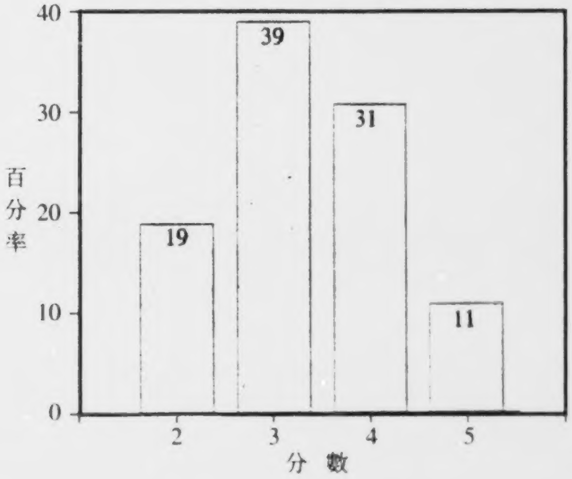
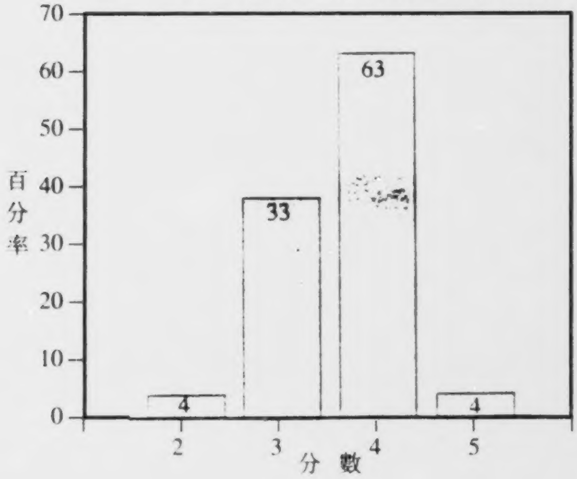
iii) 積極參與活動有助幼兒的語言發展，幼兒的理解及表達能力的提昇引証了這一點，並從「幼兒積極參與活動」這一項反映出來。當積極參與活動的人數比例在某一得分上增加時，幼兒的理解和表達能力在相對積分上的人數比例也會有所上升。在活動初期，在積極參與活動一項上取得3分或以上的幼兒人數有81%【圖七】，同一時間分別有62%及63%的幼兒在理解和表達能力面取得3分或以上【圖一、四】。

在活動中段，96%的幼兒積極參與的程度有3分或以上【圖八】。與此同時，理解和表達能力有相同程度的人數比例從62%及63%微升到67%及64%【圖二、五】。在活動後期，雖然積極參與的程度在3分或以上的幼兒人數下降至86%【圖九】，這時

圖七　思索期：幼兒積極參與活動



圖八　初步探索：幼兒積極參與活動



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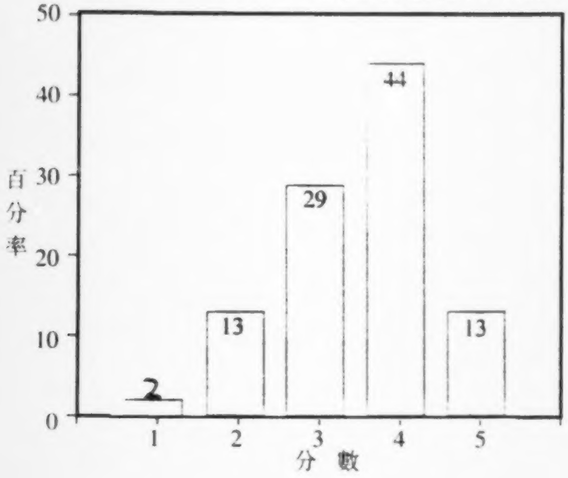
他們的理解能力達3分或以上的幼兒卻上升至75%【圖三】。積極參與和語文能力兩者的關係在兩項皆取得高分時更為明顯。在活動初期，參與活動的積極度達4分或以上的幼兒人數有42%，而理解和表達能力取得4分或以上的幼兒比例分別是20%和13%【圖一、四】，在活動中段，幼兒的興趣有增無減，引致參與活動的積極度達4分或以上的幼兒人數微升至67%【圖八】。但是，幼兒的理解和表達能力取得4分或以上的人數比例仍然分別上升至25%和33%【圖二、五】。幼兒的興趣在活動後期，積極度達4分或以上的人數達57%【圖九】，理解能力取得4分或以上的幼兒人數上升至35%【圖三】，但表達能力則從33%微降至20%【圖六】。這引証了在模型製作的階段，幼兒的智力在製作期有高度發展，幼兒更能專心及投入工作。

繼幼兒的語言能力，是次研究也分析了幼兒的主動學習及社交發展兩方面的表現。

圖九 深入探索：幼兒積極參與活動

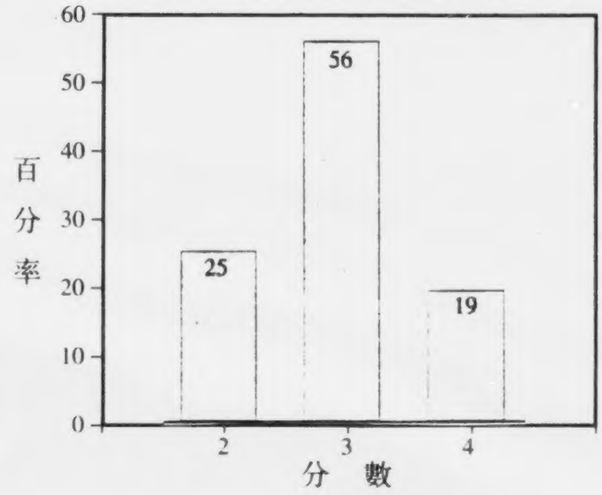


(二)主動學習

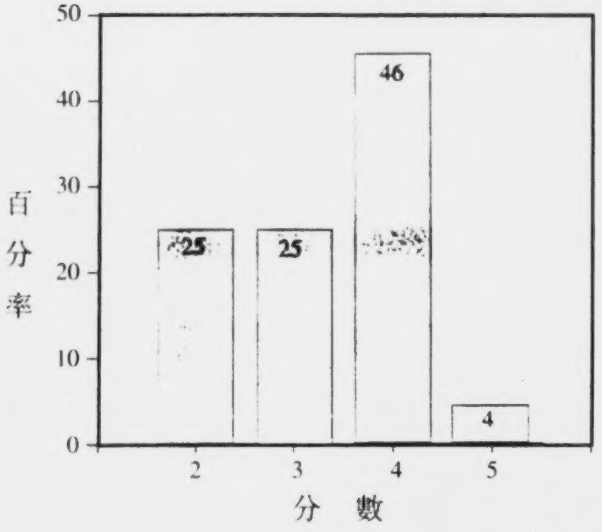
行動研究著重定質分析過於定量分析，故只提出三個有關主動學習的變數，分別是：(一)幼兒的集中能力(堅持與好奇)；(二)解決問題的能力；(三)在隊工中所付出的貢獻。

在活動初期，只有19％的幼兒在較能集中於工作上(4分)，而沒有幼兒十分專注於工作上【圖十】。到了活動中段，多達46％的幼兒較能集中精神於工作上，有4％的幼兒十分專注於自己的工作(5 分)【圖十一】。由此可見，在探索的初段幼兒已表現得很主動。

圖十　思索期：幼兒能夠集中工作



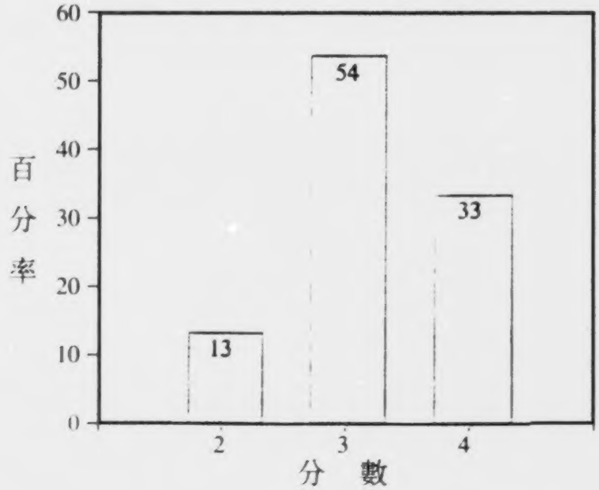
圖十一　初步探索：幼兒能夠集中工作



在結束的階段，雖然有較好集中力（4分）的幼兒的比率微降至33%，還有54%的幼兒能夠專注於自己的工作（3分）【圖十二】。這反映著幼兒的興趣隨著活動的進展而有所增強。最初有25%的幼兒對活動不大感興趣（2分），到結束時對活動不大感趣的幼兒下降至只有13%。

需要了解對活動不大感到興趣的幼兒為何會由25%下降至13%，這可能是基於一個常見的現象，就是幼兒的興趣會被其他幼兒感染有所增加。當幼兒參與在各項活動時，歸屬感也會漸漸增強。很多時，有些幼兒會對該主題可能不感興趣但對主題其中的一些活動探索，興趣卻十分濃厚，他可以找到自己的興趣去發展。

圖十二　深入探索：幼兒能夠集中工作



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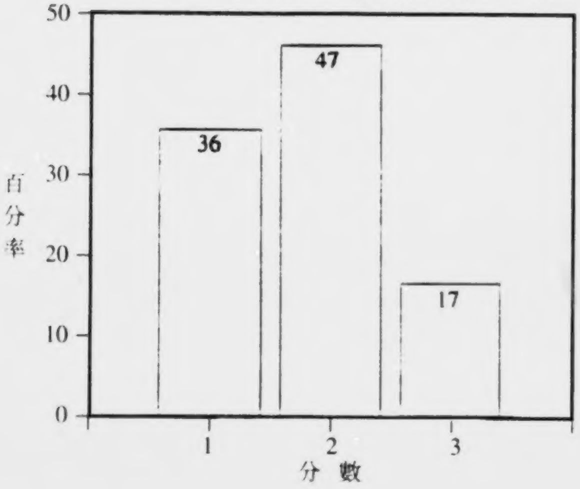
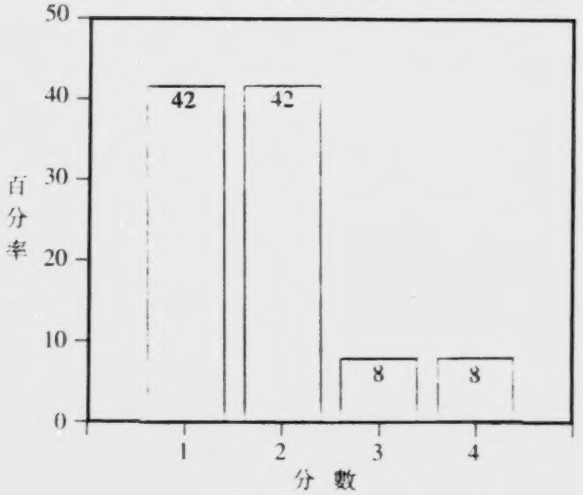
由於活動初期是以提問及分享個人經驗為主，因此這個時期較易表現幼兒的語文能力，而沒有機會發揮解決問題的能力。因此，幼兒解決問題的能力普遍也未如理想，解決問題的能力達到一般水平(3分)的幼兒只有17%【圖十三】。到了活動中段，幼兒解決問題的能力已有明顯提昇，達到較高的水平(4分)【圖十四】。在最後階段，解決問題的能力達到一般水平的幼兒人數上升至35%【圖十五】。

在分析解決問題的能力時，除了頻密程度外，更重要的是質素。「風扇」和「玉器市場」這兩個計劃活動就正好證明了這一點，幼兒解決問題的能力非常高。研究的設計是採取心理學常用的技巧，就是出現的頻率。在一個活動中，解決問題的次數可能只有兩至三次，但解決的問題質素高，學習技巧、難度也複雜，這對資料分析非常重要，因反應不只看其次數，亦要看其質素。

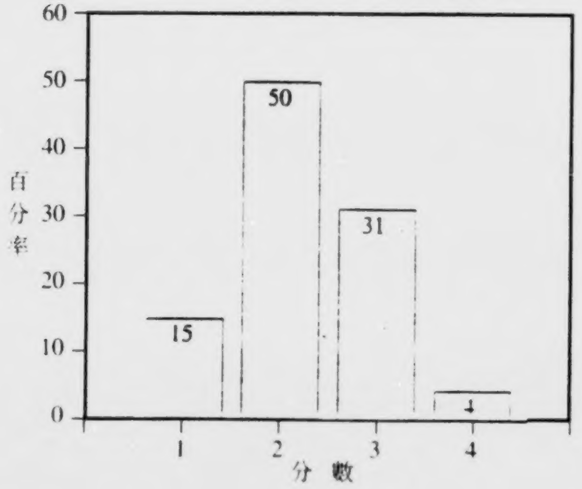
圖十三　思索期：幼兒能夠解決問題



圖十四　初步探索：幼兒能夠解決問題



圖十五　深入探索：幼兒能夠解決問題

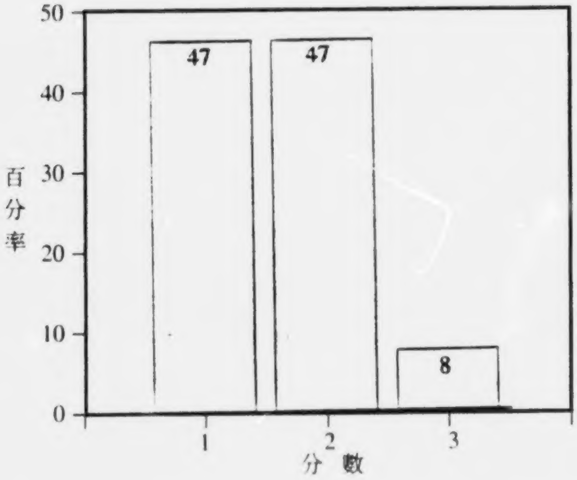


計劃活動報告記錄了活動的過程，較能反映幼兒在團隊中的表現。幼兒發揮合作精神，向著同一個目標而努力完成工作，能夠互相幫助，彼此各展所長。這都表現出幼兒的主動學習性。

(三) 社交發展

在社交發展方面，我們集中分析兩個主要因素：I) 幼兒同輩間的合作性，II) 幼兒參與活動的投入程度。在活動初期，幼兒的合作性一項的得分偏低，這是因為該段時間正值思考提問的階段，幼兒都只會提出自己有興趣的問題。所以全部的得分都介乎1－3分【圖十六】。

圖十六－思索期：幼兒的合作性



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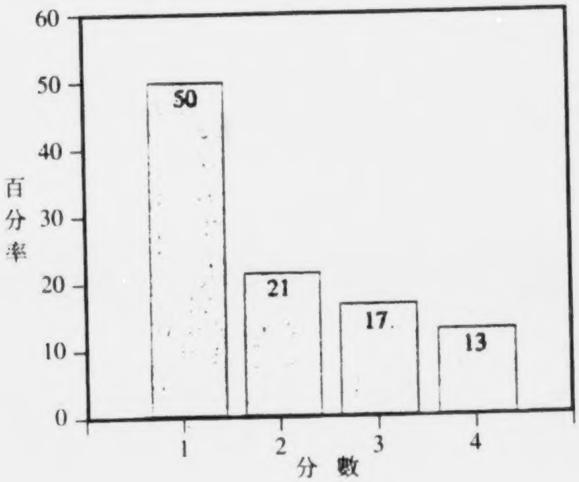
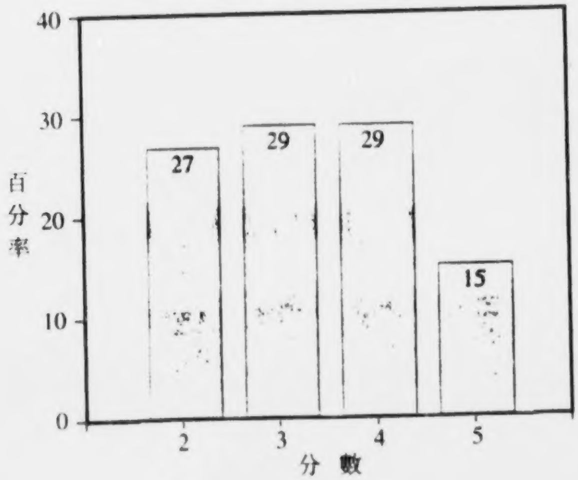
在活動中段，幼兒的合作性明顯較前頻密，已有30%的幼兒在這方面取得3－4分【圖十七】。在活動後段，取得3－4分的幼兒人數有進一步的上升，微升至58%【圖十八】。

研究第二個項目—幼兒參與活動的投入程度時，乃依照上述三個階段分析幼兒的表現。在活動初期，積極參與討論讓42%的幼兒在這項上取得4分或以上【圖七】。但在活動中期，積極投入參與的幼兒比例上升至67%【圖八】。隨著活動的進展，幼兒在探索的過程中不斷進步，只是幼兒思想和心理上的參與不能透過數字反映出來。到了活動後期，幼兒都參與在報告的活動，因此取得3分或以上的幼兒人數回升至86%【圖九】。

圖十七 - 初步探索：幼兒的合作性



圖十八 - 深入探索：幼兒的合作性



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整體有39%的幼兒明白其他幼兒參與的重要性，這說明他們懂得在別人說話時留心聆聽並接納其他幼兒的意見。

總括來說，計劃活動比傳統的教學模式更能維持幼兒的興趣，傳統的一般是33%有興趣，在這「計劃活動教學」評估幼兒的參與程度時，整體上有87.6%的幼兒取得3-5分的高分數，這証明了幼兒對活動是感到有興趣的。幼兒的興趣隨著活動的進展而加深，這可由得分偏低不感興趣的幼兒比例由初期的19%下跌至活動結束的2%看出。這是一個計劃活動中常見的現象，同輩間的興趣與課室的環境對幼兒有積極的影響，故積極參與的幼兒增及至96%。

事實上，計劃活動強調在小組及全班匯報時發揮團隊合作精神。救世軍的幼兒園教師並嘗試鼓勵家長認同合作的重要性而不只看重幼兒一己的成績。此外，由幼兒服務部編制的評估功具，可以用作評估個別幼兒的成績，為未來的計劃提供指引。再者，PAAI需要進一部驗証。自一九九七年採用以來，救世軍幼兒園的教師對運用PAAI已相當的熟悉。為了減輕教師的工作量，我們將原來用作評估個別表現的PAAI改為評估全班整體的表現。吸收了更多實際經驗後，PAAI將會在二零零一年成為評估個別幼兒的工具。

研究報告中將28個小項合併成9個大項，如棒形圖所示。又將5次不同時期的觀察分成3個不同的活動時段，包括活動初期，即思索期、初步討論及提出問

題。探索階段包括為解答疑問而進行的訪問和實地觀察等。活動後段多用作為展示幼兒所學的創作和向家長匯報成果。項目的整合是研究設計的一部份，為有效地整理資料。活動的不同階段直接影響幼兒的反應，每一個階段都各有特色。因此，我們在分析數據時需要留意這個因素。將來再為計劃活動進行行動研究時，這將會是一個很重要的考慮因素。

整體總結

(一) 參與研究的教師在會議上均贊同研究給她們一個自我提昇的機會：她們不但要操練要有敏捷的思想，還要發展橫向思維。面對著鏡頭，她們會經常提醒自己必須將計劃活動的理論實踐出來。雖然花了很多時間和精神在計劃活動上，看到幼兒進步時，教師感到所付出的一切也是值得的。

(二) 行動研究也為我們提供培訓的好機會，參與研究的教師對研究方法和評估表已有一定的了解和熟習，可以協助訓練其他教師使用這個研究方法。幼兒的語言能力的提昇已是無可口非的事實。還有實証顯示幼兒有強烈主動學習的精神，有很好的思維。這點讓我們重申：切勿低估幼兒的能力。假如教師在幼兒描述他們的作品時，將幼兒的說話多些記錄下來，再輯成有反省作用的文章，我們將能更確實地評估幼兒的語文能力。幼兒閱讀自己和教師所寫的文字時合乎語言經驗法(Language Experience Approach)，可以閱讀更多跟主題有關或無關的故事。除了幼兒自己寫的故事外，還可跟個別、部份或全班幼兒分享他們的其中一節記述。

我們對研究結果感到滿意，尤其是怎樣為計劃活動進行研究，這套方法可以供其他學校仿效。我們可以利用現時的錄影帶擬訂新的問題，又或用相

同的研究方法去搜集其他資料。

（三）數據分析可以証明園3的平均分數最高，顯示該園最能靈活運用計劃活動。在數項項目上有最佳表現，包括：評估表中(2.4)耐心聆聽他人的分享；(2.7)在組員面前演說；(3.3)主動地探索物料；第七頁的第八項：專注於工作上。

（四）數據顯示，幼兒有以上表現的出現次數相當頻密，這証明計劃活動的價值。教師漸漸由帶領活動的主導者抽身成為輔導及支持者，循序漸進。教師教學態度的轉變不但在圖表中反映出來，也可從其他資料中（問卷）找到引証。教師越來越醒覺需要給幼兒更多探索的機會，這點可從教師訪問中看出，教師也察覺到自我進步。

（五）我們對推行計劃活動抱有信心，縱然在這次研究中，我們最後也放棄了數學概念，因為救世軍轄下的幼兒園是採用蒙特梭里教學法另行專注教授數學的。

（六）教師可以更有系統地加插生字表。為進一步証明計劃活動教學法可以銜接小學的課程，我們收集了已升讀小一的幼兒的成績表，平均來說，他們都有優異的成績。

計劃活動教學法將一套有效的教學理論實踐出來，我們盼望主流教學亦可以採用這套教學法（專題研習），而不單是於課餘時的興趣小組才採用。這需要教師新文化、家長新文化、社會新文化的接納。

我們確信計劃活動（專題研習）的廣泛應用切合21世紀提倡的橫向思維，這個研究方法可用作其他研究，如計劃活動中不同階段的質素。我們願意與人分享。

行動研究後的感想

我初期與香港大學林裕康(Dr. Raymond Lam Yu Hong)博士分享這個由優質教育基金贊助的計劃1789時，他告訴我定質分析是比較適合研究計劃活動教學法在學前教育的成效。我們非常贊同林博士的意見。林博士是定量研究方面的專家，也是優質教育基金(1998)監察小組的成員之一，也便成為我心目中的顧問。林博士在計劃三期中的第一期1998/99來參觀救世軍幼兒園並給予我們寶貴的建議及鼓勵，林博士認為教師的回應與觀察幼兒的行為是同樣重要。這也和Project Approach，NAEYC論壇提出的吻合。維高斯基(Vygotsky)同樣反對利用常規測試去評估幼兒的能力。

由於目前一般人都要求以數據去証明研究的可靠性，我們唯有以簡化的數據去研究人類複雜的行為，透過研究中一些統計數字來支持我們的前設。

我們曾嘗試為是次研究尋求一份合適的常規測試，我們想藉此機會感謝Dr. Sylvia Opper慷慨將《香港兒童早期發展指標》借予我們使用。可惜我們後來發現這個指標並不適合我們這項的研究使用。Dr. Opper早前在香港進行了一項深入的研究，為香港兒童的發展制訂了一個常模(NORMS)。我們比較過後發現幼兒的程度已達到甚至已超過這個常模標準，但我們不能確定幼兒超常的程度。此外，我們也希望更深入探討幼兒特定幾方面的

能力。結果我們最後決定放棄採用這個指標。在一九九八年(活動的第一年)十一至十二月期間，我們邀請了港大博士生李輝先生為我們將香港早期兒童發展指標翻譯成中文，並用翻譯本在救世軍卜凱賽琳幼兒園試行。李先生測試後表示該園幼兒的程度已達到及超出香港的常模。進行測試時，李先生將幼兒個別帶到一個測試環境進行測試。教師需為測試準備一批教具。經過幼兒服務部內部檢討後，發現測試的項目並未能反映「計劃活動」的成效。加上我們期望行動研究能在課室環境下自然地進行，為對幼兒所造成的滋擾減至最低，所以我們繼續尋求另一行動研究方法。我們花了頗多時間尋尋覓覓，去找一位研究顧問和合適的評估工具。

我們為行動研究付出了許多時間和心血，除了獲優質教育基金撥款聘請的研究員外，教師和園長也義務參與這個計劃。救世軍幼兒服務部也加了兩名幼兒園教師參與評估工作。劉麗薇博士亦提供了一名博士研究生協助設計研究及在課室觀察的初期作出指導。課室觀察部份完成後，第一名研究員因要在二零零零年九月到教育學院進修而離職，我們再聘請了兩名較有研究經驗的研究員，在劉博士的協助下，兩名研究員完成了資料整理及分析的工作。計劃負責人在分析研究資料後撰寫計劃報告，而兩名研究員則協助計劃負責人撰寫報告。在計劃的最後一年，香港教育學院的陳鉗笙(Dr. Lorna Chan Kim Sang)博士亦在二零零一年五月到訪。

「1789計劃工程活動」的報告摘要已在二零零一年三月第三屆優質教育基金匯展舉行期間於互聯網上發放給公眾瀏覽(http://ccs.salvation.org.hk)。期終報告亦提交優質教育基金，並預期在優質教育基金的網頁上發放(英文版)。

在二零零一年十月，「計劃工程活動」結束後，我們亦將這次的經驗及感受輯錄成書。我們更希望在未來繼續進行更多的行動研究，我們非常珍惜這三年來所累積的經驗，我們不斷從嘗試和錯誤中學習，特別是研究的部份，我們已準備好將新知識應用出來。